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ABSTRACT

Teacher training and professional responsibilities in special education are the topics of nine conference papers. Educational trends and needs are identified in three papers on the future of teacher preparation programs, new directions in curriculum in relation to black and other minority students in teacher training programs, and the black professional as an agent of change. Other papers discuss training special education teachers in behavioral psychology, classroom observation systems for the improvement of teaching, training for teachers of aurally handicapped infants and their parents, and the training of consulting teachers to provide special education services within regular classrooms through consultation with teachers, administrators, and parents. Final papers explain the multidisciplinary approach to special education in Washington County, Virginia and report on the role of the consulting teacher in the use of home consequences to reinforce classroom behavior modification and learning procedures. (KW)

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Exceptional Children Conference Papers:
Teacher Training and Professional Responsibilities

Papers Presented at the
50th Annual International CEC Convention
Washington, D.C.
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Considerations for the Future of Teacher Preparation Programs in Special Education

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I have been asked to discuss, briefly, my perception of what teacher preparation programs in Special Education might be like in the future. The reason for including my topic on a panel such as this is related to the fact that the concepts just presented represent an alternative to existing approaches to preparing special educators. Using the phraseology of behavioral objectives, the purpose of my inclusion might have been stated as "Given the opportunity to hear a series of presentations about an attractive alternative to preparing special educators, the department chairman will say...." (My task would have been easier if Professor Crosson would have completed the objective and specified the behavior desired beyond the stipulation that I say something.) Given the freedom to complete the objective myself, I have decided to discuss, briefly, three considerations for the future of teacher preparation programs in special education. In my estimate, special education teacher preparation programs will increasingly be (a) a continuous process, (b) competency oriented and (c) emphasizing "mainstreaming" of teacher preparation.

Teacher Preparation: A Continuous Process

Teacher preparation in special education has been and is currently conducted on a preservice basis. Students wishing to teach handicapped children are provided with an educational experience that, upon completion, certifies that they are able teachers. Implicit in this certification is the assumption that the teacher's education is complete except for an occasional need to refresh their existing skills at the fountain of knowledge.

Participation in post high school education is increasingly being viewed as a beginning rather than an end. Given this view, preparation to teach would be viewed as a continual, life long process. For example, the recent Special Report (1971) of the Carnegie Commission on Higher Education recommended:

> That opportunities be created for persons to re-enter higher education throughout their active careers in regular daytime classes, night time classes, summer courses and special short-term programs, with degrees and certificates available as appropriate. (p. 19)

The Commission also recommended that "opportunities be expanded for students to alternate employment and study...." (p. 19). Likewise, Toffler recommends that "education...be stretched over a lifetime...." (p. 407), thus reducing the need for fulltime attendance in school.

Teacher education programs will incorporate these suggestions into their preparation programs. By doing so the distinction between preservice and inservice education will be broken. Within this context education will be viewed as a beginning rather than a culmination. By incorporating these suggestions into program design, teacher education programs will become much more field-centered than they are currently.

A Competence Orientation

The view that teacher preparation programs provide teachers with a beginning will heighten the demand that teacher education become competence oriented. As you are already aware, the long awaited revolution within education has begun. The revolution that we are experiencing is associated with teacher preparation programs organizing themselves to assist students to achieve systematically a specified set of demonstrable teaching competencies.

Teacher education programs of the future will focus on assisting the student to acquire both knowledge and skills related to interpersonal processes, instructional processes, and evaluation/research processes. Within each of these areas demonstrable, achievable objectives can be specified. The process of acquiring these objectives will be highly individualized. Because of the potential individualization and the ability to specify the outcomes desired of the preparation programs in behavioral terms, the teachers or groups of teachers will be able to "contract" with preparation programs for assistance in achieving the outcomes.

Emphasis on the achievement of competence will have a number of benefits. We can be more systematic in our teaching efforts. We will be able to demonstrate that we, as teacher educators or teachers of children, are effective. Our students will indeed learn. Certification to teach will be focused on the correct dimension and will be easier to obtain across state lines.

Mainstreaming of Teacher Preparation

An assumption basic to a competency based approach to teacher preparation is that "those behaviors which define 'effective' teaching are basically the same regardless of the disability, or the ability of the child being taught" (Stamm, 1972, p. 4). It is this assumption that has led to the development of non-categorical approaches to teaching handicapped children. While we have applied the assumption across categories of handicapped children, it is more logical to affirm that the behaviors called teaching are the same for all children.

Affirmation of this truth removes the necessity to define what is special about special education. Recognition of this truth reveals that there is basically nothing special about special education except our favored position with respect to the acquisition of educational funds. Recognition of this truth by both regular and special educators will result in a gradual merging of special education teacher preparation with regular education. The result will be a return of "our" teacher preparation programs to the educational mainstream.

Concluding Comments

With its emphasis on competency based teacher preparation and individualized instruction, regular education is becoming more "special". With its movement toward competency based, non-categorical approaches to teacher preparation and the return of many handicapped children to the educational mainstream, special education is becoming more "regular". These developments point to a brighter educational future for all children.

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NEW DIRECTIONS IN CURRICULUM

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Recent trends have led to an increased enrollment of minority students in teacher training programs. Our focus today is upon members of minority groups who will be future special education teachers, with particular emphasis on the black college students.

A review of the literature has revealed that there is a universal awareness of the need to improve teacher training programs generally. However, few of the plans for broad and innovative changes give sufficient concern for the special needs of the minority students who are enrolled in most teacher training programs. Little was found about such students who plan to be special education teachers.

The paucity of literature, which deals with the special needs of minority college and university students, suggests that more research may be needed in the following areas in order to produce a more effective curriculum in special education:

(1) Selection of college personnel on the basis of their ability to teach versus degrees and the training that has been received.

(2) Open admissions

(3) Full understanding of the minority student

(4) Field experiences in advance of the student teaching sequence and other methodology

Please note that much of what is suggested here for the improvement of the training of tomorrow's special education teacher has implications for all teachers. It may also be noted that the above listed areas of research might be extended. The time limitation prevents discussion of such an extension.

Item 1 -- Selection of college personnel on the basis of their ability to teach versus degrees of training might be a primary factor in facilitating the student's learning in the courses in his teacher training program. Do the colleges and universities seek to verify a professor's teaching ability or are they chiefly concerned with the acquisition of higher degrees? Too many students find that they are ill served by teachers, who appear to be insensitive to the needs of most students; and particularly disadvantaged students who may or may not be scholastically troubled. How many of your university teachers would you have rated excellent? Good? Did you leave a course at the end of the quarter or semester feeling that you had learned an ample amount about how to teach? What to teach? How often did you experience the feeling that your time had been wasted, and credit your instructor with the responsibility for this waste. It is true, the student must accept some responsibility for the failure to benefit from any of his courses. His responsibility may lead him to "teach himself" or to make the teacher aware of the lack of learning, and help make changes in the course that may facilitate learning. To make innovative changes in a curriculum without ascertaining that those who direct, supervise and teach the various courses ably so that the student benefits, negates the positive effects of the most promising of curricula.

Item 2 -- Open Admissions at the college and university level would be an extension of what has been done at the elementary and secondary levels for some time. The public school systems in many sections must now provide education for all children including the exceptional.

High school graduates who are disadvantaged have found no easy access to college admission. Belle Zeller discussed "College Education For All"? in Today's Education for March, 1972. She indicated that five out of ten top high school graduates in the lowest socio-economic bracket among the top scholars go on to college. One-half million do not go to college each year because none is available to them. In September, 1970 the City University at New York began an experiment with the open admissions policy. There was an increase of 15,000 freshmen that year resulting in 76 percent enrollment of all the city's high school graduates or a total of 35,000 freshmen. About 10,000 freshmen dropped out after the first year for non-academic reasons. Due to a one year grace period none were dropped for academic reasons. It was felt that this program threatened the graduate program, demoralized the faculty, and devalued the college degree. The students felt that open admission was a fraud. Dr. Zeller noted that CUNY's program should not be judged prematurely. It would appear that reaction to this policy of open admission to college was generally negative.

California's open enrollment system is similar to CUNY's, but is older, according to Zeller. This plan began in 1960 and uses remediation as a key factor, as does the CUNY plan. One important question is that of whether higher education can coexist with the equality of access. Tomorrow's minority student may find easier access to college admission if research supports the success of such a plan. Unless curricula changes recognize the cultural differences among students, universities will continue in their disservice to black students.

Item 3 -- Full understanding of minority students who are enrolled in teacher training programs is as important as Reissman's suggestion that public school middle class teachers must understand the cultural differences of their disadvantaged students. Many colleges and universities have included courses that deal with the education of the disadvantaged. Such focus began in the 1960's and is continuing. Now Black Studies are being developed.

In Today's Education for January, 1972 a summary of the UCLA-U. of Kansas survey noted that 45 percent of 72 universities and colleges had courses in Black Studies, and 8 percent planned to begin courses in the future. No special pattern was found among these programs. In some instances, a greater number of nonblacks teach these courses basically because no black teachers are available. Some Africans with Doctor of Philosophy degrees have been used. More black students than whites take these courses. This suggests that those college teachers who have black students enrolled in their classes may not be taking this means of better understanding the blacks in their classes. The same applies to other minority students such as the Mexican Americans, the American Indians, Puerto Ricans et. al.

The NEA Research Division survey revealed that 44 percent of the teachers integrated Black Studies with other subjects. Teachers have educated themselves on what books are worthwhile because this field is still in the process of being defined, especially on college campuses.

The need for psychologists to fairly assess the black's physical, intellectual, social, and emotional development has been discussed at length by Dr. Jesse White in "Toward A Black Psychology - White Theories Ignore Ghetto Life Styles." He noted that blacks are culturally and psychologically deprived because their experiential background provides them with inferior preparation to move effectively within the dominant white culture. "A comprehensive theory of black psychology will have to explain in much greater detail the dynamics of the black home, family, hero, role model, language systems, work and time management and the nature of suspiciousness. A primary concern is that of the lowered self-concept among minority students."

Item 4 -- Field Experiences in advance of the student teaching sequence would place the university student in the classroom with children early in his college career. This may take a variety of forms and may be variously structured. Joseph Robinson in the February, 1972 issue of the Kappa Delta Pi Record discussed such a plan, which should provide a voluntary aspect. In other words, the student should be provided with alternatives in his teacher training program. Such an approach would necessitate adequate communication between the university and the community in order to fully utilize community resources.

Other changes in teacher education programs may be influenced by a reduced work week where the students might attend school four days a week and the fifth day being given to in-service teacher training. This might reduce some of the problems presently experienced, because of school personnels' failure to keep abreast of the changing focus in education. Some teachers continue to use the same course outlines, texts, and methods long past their usefulness.

Curricular changes at the high school level may be needed in order to facilitate the minority student's transition from high school into a teacher training program. This suggests a new kind of communication and cooperation between secondary schools and universities. Instead of the universities lamenting the caliber of high school graduates, and seeing the secondary personnel as solely responsible, attempts should be made to help the secondary schools produce the adequately prepared graduate. This means that universities must seek to change not only their own curricular approaches, but those at both the elementary and secondary levels.

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THE BLACK PROFESSIONAL AS AN AGENT OF CHANGE

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Introduction

Today I want to share with you some very pressing needs to which we should address ourselves as black professionals - - - needs for which we will not be able to meet the challenge without personal involvement.

Those of us who are involved in teacher training programs or teach educable and trainable mentally retarded children, or work with cerebral palsied, deaf blind, crippled, emotionally disturbed or children with other handicapping conditions have a great deal in common. We are all concerned with the cognitive, emotional, social and physical growth of children.

According to James Cass (1970) the two most powerful forces for educational reform that have appeared in this century are the civil rights movement and the student rebellion. These events stirred widespread ferment and dramatized the desperate need for the educational enterprise. During the early years of the 60's the Civil Rights Movement pricked the conscience of the nation and sparked a massive drive to give reality to the ideal of equal education opportunity. The student rebellion, on the other hand, made clear that in large part the schools were failing the advantaged as well as the deprived."

During this period these factors were paralleled by the rapid expansion of special classes for the educable mentally retarded. At this point Black professionals should have taken the initiative and challenged some of the basic assumptions with regard to special class placement. But this organizational pattern was still being viewed by most educators as the most desirable and positive solution to the problems of educating exceptional children.

To provide a proper focus and impetus for further exploration of ways in which black professionals can become agents of change, I should like to propose several questions for consideration. These are:

1. What do black professionals need to know that we don't know now? How do we propose to obtain this knowledge?
2. What kind of educational personnel do we need to enhance the learning environment so that the handicapped child can learn to his maximum capability?
3. Is the administrative organizational structure as it presently exists adequate for the education of handicapped children?
4. Is it necessary to establish new kinds of roles for black professionals to implement change in the educational environment?

Because of time limitations it will not be possible for me to explore these provocative questions in depth but only to provide some preliminary information.

Black professionals need knowledge of the way in which intelligence develops and the effects of environmental encounters upon development, especially in the early years. Research tends to suggest that black children score consistently lower on standardized tests than do white children.

The question that should be raised here is "Is the lower score a result of test bias or is it because these children are lacking in appropriate environmental encounters?" It is my position that these children have inadequate ways of dealing with these encounters and the school must assume the responsibility in helping to develop the intellectual and academic potential of these children.

As James A. Banks points out "We must construct new conceptions of human intelligence and devise instructional programs based on these novel ideas to improve the education of ethnic minority groups."

A broad knowledge of the cultural patterns, the special problems, the strengths and weaknesses of ethnic minority children would provide the professional with information for the development of the most appropriate strategies and methodologies for educating these children.

By studying the relationship between non-stimulating environments and cognitive functioning it is possible for teachers to identify those abilities which are susceptible to change; and gain insight into those traits which can enhance the cognitive development of children labeled as retarded.

A comment by Frank B. Wilderson (1971) substantiates this position. He states:

> -- "If teachers are to see their educational leadership role as one of guidance rather than categorizing and labeling then they must be exposed to a training program in which they are guided rather than labeled."

Within this framework a major concern is the current emphasis upon providing special learning experiences for young children. Studies by Gray and Klaus (1965), Hodges McCandless and Spicker (1967) and Weikert, et. al (1971) have shown that children with intellectual deficits reveal significant IQ gains when exposed tp specially planned learning activities.

A large segment of children who experience difficulty in school are from low-socioeconomic homes, and may be labeled as disadvantaged, deprived, psycho-socially deprived, borderline, or educable retarded. Many of these children enter first grade with a poor self concept, poor performance on standardized tests, short attention span, negative attitude toward authority, language deficits and with other basic problems that reveal a gap between the school, community and the child.

During the past several years efforts to provide early education for black children have increased significantly. A majority of the existing child development centers emerged as community sponsored projects such as Headstart to meet pressing needs of poor black families. However, this movement is presently impeded by two major problems: 1) inadequate public and private funding and 2) a scarcity of personnel especially black persons with experience and expertise in early childhood education.

Most of the existing programs for children with handicaps are established as self contained classrooms. However, these is emerging evidence suggesting that handicapped children, and especially black disadvantaged children labeled as handicapped are educated more effectively in regular settings. This is not only supported by professional evidence provided by Goldstein, Moss and Jordan (1968) and Dunn (1968) but also legal evidence concerning the placement of children in special classes (Ross, DeYoung, Cohen 1971).

It should be pointed out that there is no magic formula for specifying the competencies needed by teachers and other personnel in the area of special education. The current focus on the affective domain, however, is adding a new dimension to the teaching learning process. Helping the child develop a concept of self as an individual of worth, and dignity and instilling in him positive attitudes and values are recognized as important as developing an enthusiasm for learning.

Educational personnel are needed to enhance the learning environment so that the handicapped child can learn to his maximum capability. To accomplish this task a program to raise the level of self concept would strengthen the students self confidence.

Need for programs to raise the level of self concept derive from the fact that research indicates that black children tend to express feelings of self rejection and low self concepts.

A pioneer study by Clark and Clark gave documented evidence of the negative attitudes that the children held toward skin color. The preference of white dolls over black dolls was viewed as an indication of self devaluation.

A replication of the Clark and Clark study by Grossack indicated that fifteen years later most of the children in the latter study also preferred white dolls. A small scale research project conducted in 1971 by Knight yielded similar results.

Statistics reveal that a large number of black professionals have a substantial investment of time devoted to educational training in the area of exceptional children. Yet, we are facing a crisis which cannot be solved by simply increasing the number of persons being trained. The crisis is one of raising the level of self concept and providing quality type programs for the thousands of black children who are not receiving an adequate education.

It is imperative that a policy be formulated to increase the number of innovative programs to reduce the gaps in knowledge and increase the learning potential of black children who are doomed to educational, social and economic failure.

Is the administrative structure as it presently exists adequate for the education of handicapped children? This question is not new. Goldstein, Moss and Jordan in (1966) questioned the efficacy of special class placement and later Dunn raised the question as to whether special education for the mildly retarded was justifiable? Similar questions have been raised by John L. Johnson and numerous others. In a recent article Wilderson (1972) focused on the tendency of over assigning certain minority group children to special education.

Despite these questions, comments and concerns there is still a growing tendency to assign large numbers of black children to special classes.

Unable to experience success in the educational activities provided in the regular academic classes, these students resort to truancy, deviant behavior and a generally low performance level. Later upon administration of a standardized intelligence of achievement test these children score at a sub normal level and on the basis of IQ are placed in special classes.

This appears to be an appropriate time for assessment and committent to the goals and purposes of special education. An examination of the recent emphases point to several changes that have emerged. Among these are the de-emphasis on labelling children who have special needs -- that is placing them in discrete categories or classification schemes, and the dehumanizing effect of excluding children from the mainstream of public education, and other important issues that extend beyond the scope of this paper.

We need to place in proper perspective the purpose and effect of these practices and eliminate outmoded ways of thinking; noting both positive and negative effects and focusing on an objective appraisal of the problem.

The most logical persons for proposing changes within the framework of the existing structure is the black professional members of college and university personnel. Articulate persons with expertise in the area of special education can provide the impetus for advocating for minority group children labeled as mentally retarded and negotiating for their return to the regular classroom.

It is apparent that the major responsibility for resolving the present dilemma cannot be borne by the black professional working in isolation. To insure success aid must come from all individuals and agencies concerned with the education of exceptional children.

If the practice of assigning minority group children to special classes continues, the black professional can provide a key role in the implementation of quality programs in special education. As educators, we can give impetus to effective and positive programs. Combined efforts will insure that emphasis is placed on devising a curriculum relevant and responsive to the needs of these students.

Many students, particularly at the high school level are trapped in an educational program which is totally unresponsive to their educational and social needs. Particular consideration should be given to possible factors in the students experience which may have damaged his ego and thus hampered academic achievement.

The most crucial aspect of the present situation is the apathy on the part of the black professionals. In this time of challenge and change, Black professionals should become decision makers and provide qualified leadership in conducting research and training programs. This notion derives from the fact that as a group today we can no longer afford to remain silent and allow black children to be arbitrarily placed in special classes without being sure that's where they belong.

The future of special education depends on professionals coming to a better understanding of the policies and procedures that are shaping the programs. Men and women who are placed in leadership roles must be selected on the basis of ability, leadership potential, and commitment to the solution of the problems of exceptional children rather than on the basis of skin color.

In closing, I should like to propose several ways in which black professionals can implement change. Among these are:

1) Accept the challenge for educating the high risk students
2) Participate actively as leaders in local, state and national professional organizations
3) Improve the image of special education through inter-professional relations
4) Give increased attention to problems of young children

5) Raise the level of expectation for children assigned to special classes

6) Strengthen the relationship with parents of handicapped children

7) Provide a larger number of specifically trained teachers to identify and work with children with developmental problems in regular classroom settings.

8) Develop competencies of minority group teachers, especially black teachers, in compensatory education for children traditionally labeled as handicapped.

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TRAINING TEACHERS OF EXCEPTIONAL CHILDREN IN BEHAVIORAL PSYCHOLOGY

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Paper presented at the 50th Annual International Convention of the Council for Exceptional Children, 1972, Washington, D. C.

TRAINING TEACHERS OF EXCEPTIONAL CHILDREN IN BEHAVIORAL PSYCHOLOGY

John Raymond Blair and Eugene E. Haddan

The recent impact of behavioral psychology on education has been only slightly less than phenomenal. The last decade has seen a significant increase in the number of educational and psychological journals which publish articles or are exclusively devoted to the application of behavior modification for teachers. For example, the October, 1970, issue of Exceptional Children was devoted exclusively to behavior modification. Concurrently, there has been a tremendous increase in the publication of manuals and books on behavior modification for teachers and related professionals (e.g., Ackerman, 1972; Sulzer & Mayer, 1972; Sheppard, Shank & Wilson, 1972; Becker, Engelmann & Thomas, 1971; Clarizio, 1971; Diebert & Harmon, 1970; Meacham & Wiesen, 1969; Bandura, 1969; Ferster & Perrott, 1968) and books of readings with studies applying behavior modification in the classroom (e.g., Harris, 1972; Becker, 1971; Hamerlynck & Clark, 1971; Pitts, 1971; Ramp & Hopkins, 1971; Fargo, Behrns & Nolen, 1970; Ulrich, Stachnik & Mabry, 1970).

Growth of academic interest in training special educators in techniques of behavior modification has accompanied the proliferation of the literature. Many special education departments now feel obligated to avail themselves of at least one individual who is strongly identified with behavioral psychology. In addition, more and more instructors are including behavior modification principles and techniques in their undergraduate and graduate courses even though they may not consider themselves "behaviorists."

Although the formal beginnings of interest in behavior modification may be traced to the early part of the 20th century, practical applications were made by the ancient Greeks (Zilboorg & Henry, 1940). During the twelfth century tangible rewards such as honey, nuts and figs were used to reinforce learning the Torah (Birnbaum, 1962). Three hundred years later, Erasmus advocated cherries and cakes in place of the cane in teaching children Latin and Greek (Skinner, 1966).

Perhaps Itard's work in 1800 with the "wild boy of Aveyron" represents one of the earliest documented uses of positive and negative reinforcement in special education. Sequin, a disciple of Itard, used reinforcement principles in working with the mentally retarded (Forness & MacMillan, 1970).

In the 20th century Pavlov, Watson and Thorndike first intensively studied ways of systematically influencing behavior, and then B.F. Skinner began discovering ways of polishing up their ideas.

It is common to assign the upsurge of interest in behavioral research to the 1950's, but in the early '60's programs of behavior modification for exceptional children were developed at a rapidly accelerated pace. The systematic techniques used by Ayllon and Houghton (1962), Bandura (1965) and Hewett (1964, 1968) among others began to replace the previously fragmented and rather haphazard approach to child management. The focus of behavior modification programs during this time was primarily on the education and treatment of the emotionally handicapped and the mentally retarded. More recently, the focus has been extended to include the deaf, blind, physically handicapped, disadvantaged and children adjudicated as delinquent. Today, we not only see the successful application of behavior modification to the problems of exceptional children but to some difficult problems met with in the regular classroom.

While the major emphasis of behavior modifications programs for exceptional children has been on remediation, the techniques are preventive as well. "Catch the child behaving appropriately" should become a challenging motto for all teachers. The emphasis here is rather foreign to many of us. Rarely do we let another person know when he is behaving appropriately but we certainly let the person know when he is behaving less than desirably. If you do not believe this, note your own behavior or ask your spouse, children or students. By reinforcing desirable behavior, that is, systematically influencing behavior that is in another person's best interest, the person is less likely to behave inappropriately to obtain reinforcement. Reinforcement is any consequence of behavior which increases the probability of the recurrence of that behavior. The concept of contingency between behavior and reinforcement is the key concept in operant behavior modification techniques.

There are those, of course, who believe that behavior can and should be maintained without (external) reinforcement; that is, good behavior or learning is its own reward. Irrespective of the appropriateness of this belief with regards to exceptional children, an analysis of the behavior contingencies of one who is "good" or "learns" will reveal that good behavior or learning is periodically reinforced and/or the behaviors avoid certain undesirable outcomes such as criticism, shame, or punishment. Until we give up the notion that good behavior or learning is (totally) its own reward, we will be faced with failures in the socialization and educational processes (Tharp & Wetzel, 1969).

In addition to being concerned with accelerating or decelerating some behaviors and maintaining others, behavioral psychology deals with specification of educational goals. It is not true that the behavior modification strategy offers a powerful methodology but essentially has no educational goals. While there are goals which ought to be determined by individual teachers and others which are largely determined by administrators and are colored by educational philosophies, there are also objectives which may be specified rather precisely and for which a certain degree of communality may be found.

As an example of an effort to combine specific educational goals with the behavior modification strategy, we may examine the work of Hewett, of UCLA. He has developed a developmental sequence of educational goals for emotionally disturbed children--goals which can be useful for any teacher. Lindsley, at the University of Kansas, provides another example, with his "precision teaching." The focus is on the measurement of daily improvement--improvement linked with specific goals. These efforts at precision are extremely important. As recently noted by Edwin Martin (1972), Associate Commissioner of Education, accountability of special education for handicapped children will be a key concept of this decade.

One characteristic of the teacher who believes in and systematically applies behavior modification techniques is that he sees each student as an individual, because the "content" which works for one student may not work for another, nor will it always work in the same way for the same student. Since every child is different, this makes the labels so glibly applied to individuals not so important. Each student can learn, behave appropriately, and realize his potential. Belief in the potential of the child is not or should not be limited to the humanistic orientation, though critics are likely to consider behaviorists as being unconcerned. The teacher's style should include behavior modification techniques, as should his methods, and materials ought to be utilized with it always in mind.

Don't you believe it when you hear that teachers who use these techniques are callous, manipulative individuals who control children because they themselves have a need to control. While it is true that among the behavioristically oriented there are undoubtedly some who wish to gain that power for its sake, it is also true that there are those of other persuasions who seek to help themselves more than to help others. No one approach has the corner on "humaneness". For example, the method may be behavior change for the better, but the technique which applies the method may be behaviorism or humanism. Perhaps there is a need to coin the phrase, "humane behaviorism."

As participants in this clinic, some myths will hopefully be destroyed and some light shed concerning humanism and behaviorism so that we may see them as only differing paths to the same goals of educating exceptional children.

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Observation Systems for the Improvement of Teaching

I. Cognitively Oriented Systems*

William W. Lynch

A classroom observation system selectively records those events in a classroom that are important to the accomplishment of the teacher's goals. Goals in educational practice vary depending upon the philosophy, social context, types of pupils, teacher's role and function, the content of instruction, and the instructional resources available to the teacher. Because of the variety of goals, observation systems vary greatly in purpose and design. At the present time there are probably at least 200 classroom observation systems in use, each with a limited range of purpose.

At the Center for Innovation in Teaching the Handicapped we have developed observation systems to serve our main interests in what happens to the handicapped child in the classroom--whether it be the special class, regular class, resource room or whatever the setting. Our observation systems can be divided into two types--those that focus on the interpersonal, affective and group management aspects of teaching and those that focus on the cognitive, instructional aspects. Dr. Al Fink will address himself to the former and I shall discuss the latter.

In using an observation system to give us a picture of the child's cognitive experiences in the classroom, we need a record of each pupil's opportunities to participate in those activities that are relevant to his accomplishing the skills, knowledge, and understandings sought by the teacher. We have particularly been interested in how teaching is individualized to involve different children at levels of cognitive activity appropriate to their individual needs and levels of readiness. Also of importance is having a record of the extent to which the teacher creates opportunities for the individual to participate actively with the teacher and with others in the give and take of the classroom dialogue.

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The Individual Cognitive Demand Schedule was developed by us by observing many special classes for EMR children. It distinguishes between the common types of intellectual activities that occur in those classes. It provides a way of recording each child's experience of active participation in the teaching-learning activities of the class that are mediated by the teacher. This instrument has been used both in basic research and for helping teachers improve their skills in interacting with individual children on learning tasks that are essentially cognitive. The basic goal in developing the Individual Cognitive Demand Schedule was to develop ways of helping the teacher prevent individual children from "getting lost in the shuffle" of classroom interactions. By making a teacher more aware of how he is affecting specific children during instruction, we can help them find ways of more deliberately involving children in instructional interaction in ways that suit their abilities and that accomplish individualization objectives.

An observer using the ICDS locates himself in a classroom so that he can see and hear most of the interactions between teacher and individual pupils. Each time the teacher interacts with a child concerning an instructional task or instructional material, that interchange is coded. First, the child involved in the interchange is identified. Second, (if the teacher initiates the interchange) the observer codes the teacher's cognitive demand--that is, the kind of mental activity that is implied in the teacher's request, question, or task posed to the child. There are eleven categories of cognitive demands, ranging from very simple, concrete demands to complex, abstract demands. Third, the observer codes the child's response, using the same eleven categories. Finally, the observer codes the teacher's feedback to the child. There are seven categories of feedback which can be reduced to three basic types--positive, negative and informative (see Table 1).

After a sufficient sample of the teacher's interactions with a group is obtained, the record can be summarized in several ways, depending on how it is to be used. Typically a summary of interchanges with each child is compiled, breaking them down into the principal types of cognitive demands and feedback. Summaries of the frequencies of pupil-initiated interchanges, no-pupil-response, and types of sequences of cognitive demands with the same child help give a picture of the teacher's instructional strategies with a child and the child's responsiveness to those strategies.

Research with the ICDS has attempted to identify significant teacher styles, the relationship between teacher cognitive demands (such as the teacher's questions) with a child and the teacher's expectancies regarding that child, the extent to which teacher cognitive demand styles can be modified, and the relationship between teachers' cognitive demands and pupil learning. The ICDS has been used in regular elementary classes and with elementary student teachers as well as in special classes. It is one of the principal instruments used in Project PRIME, the USOE's large-scale study of special education in the state of Texas. It is used in the CATTS Project at Indiana University, providing continuous computer-mediated feedback to teachers.

The ICDS may be used to help teachers adjust the cognitive levels of their interactions to their objectives and to the capabilities of individual children. The record of interactions with each pupil in a group can show the teacher the extent to which all pupils are given opportunities to interact cognitively with the teacher and whether these opportunities are at a level that is appropriate for the child and the teacher's objectives. The record also shows whether the teacher's feedback to a child's responses is informative and supportive.

Table 1

Summary of Teacher and Pupil Categories

Low Level Cognitive Demands

1. Habitual Responding (HR) - "Repeat after me."

   An activity that requires a simple, habitual, almost automatic response.

2. Observing-Discriminating (OD) - "Say what you see."

   The child is asked to notice, identify, and/or describe things which are in front of him (no memory is involved).

3. Stringing (St) - "Read the first paragraph."

   The child is required to make already-learned responses which form a natural sequence. E.g., reading aloud, spelling, counting, singing.

4. Remembering (Re) - "Remember what happened in the story."

   The child is called upon to remember and tell something he has experienced himself or through reading.

High Level Cognitive Demands

5. Explaining (Ex) - "How? Why?"

   The child is given the opportunity to recall a rule or generalization. The rules used are those which the child already knows and understands.

6. Defining-Classifying (DC) - "What is a wambat?"

   The child is called upon to demonstrate his understanding of a concept by supplying the correct meaning of a term or by giving the correct label for a set of examples.

7. Applying-Comparing (AC) - "What's the difference?"

   The child is invited to compare and/or contrast *concepts*, to relate generalizations, to apply a rule, or show why it applies.

8. Inferring (In) - "Did the butler do it?"

   The child is asked to arrive at his own conclusions, deductions, hypotheses, or interpretation from available information.

9. Making Believe (MB) - "Let's pretend."

   The child is given the opportunity to freely elaborate on an idea without any constraints.

10. Value-Judging (VJ) - "Do you think that's a nice thing to do?"

    The child is required to judge the goodness (worth, suitability, etc.) of something. Requiring the child to justify his judgement also belongs to this category, as does expressing how he feels about something.

PROFESSIONAL PREPARATION OF TEACHERS OF HEARING-IMPAIRED INFANTS, 0-3, AND THEIR PARENTS

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What special competencies - are needed by teachers of hearing-impaired infants, birth to three years of age, and their parents? How proficient are these individuals in the kinds of knowledge and abilities they identify as most important? What are the implications in terms of the nature of professional preparation in the future?

HISTORICAL PERSPECTIVE

In 1965 the median age of eligibility for admission to a public day school or classes and private residential schools was between three and four years. The median for public residential schools was at the top of the four-five range while that for private classes was between two and three years.[1]

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[1] Education of the deaf: a report to the Secretary of Health, Education and Welfare by his Advisory Committee on education of the deaf (Washington, U.S. Government Printing Office, 1965). Appendix D-2.

The curriculum for these preprimary hearing-impaired children generally consisted of "simplified versions of elementary school practices or of unstructured free play".[2] There was little concern for the transfer or maintenance of educational gains through parent involvement.

Emphasis upon the quality of phonemic utterances, language drills, and a controlled vocabulary and formal speech-reading in these preprimary programs[3,4] led Phillips[5] and Craig[6] to conclude that preschool training did not produce permanent gains in speech-reading and reading skills in later years in contrast to control groups who did not receive the benefit of preprimary intervention.

By 1968, the realities of federal funding and a supportive social climate in the United States encouraged a proliferation of programs addressing to the hearing-impaired infants, 0-3. The Nashville Conference of 1968[7] convened project directors and teachers in the Demonstration Home projects funded by the U.S. Office of Education to discuss educational practices in the management of deaf infants, birth to three years, who were identified as a special entity within the preschool category.[8]

[2] Ibid, p.7.

[3] Numbers, Mary E. A word is a word is a word, Volta Review, 56:1954, p. 66-71.

[4] Calvert, D.R. An approach to the study of deaf speech. Proceedings. International Congress on Education of the Deaf. (Washington, U.S. Government Printing Office) 1963, p. 242-245.

[5] Phillips, W.D. The influence of preschool language on achievement in language arts, arithmetic concepts and socialization of young deaf children in residential schools. Unpublished dissertation, Teachers College, Columbia University, 1963.

[6] Craig, W.N. Effects of preschool training on the development of reading and lip-reading skills of deaf children. Amer Ann. 109:1964, p. 280-296.

[7] McConnell, F.L. Conference on current practices in the management of deaf infants (0-3 years) Proceedings. Bill Wilkerson, Speech and Hearing Center, Vanderbilt University, June 21-22, 1968.

[8] Education of the deaf: the challenge and the charge. Proceedings. National Conference on Education of the Deaf. (Washington, U.S. Department of H.E.W. April, 1967, p. 77.

The identified commonalities in Nashville mirrored the definitive statements presented at the Toronto Conference of 1964[9] on identification, treatment, and educational management of deafness in very young children in England, the Scandinavian countries. Two over-riding concerns emerged:

1. Early amplification and a dynamic program of auditory rehabilitation through home training of the _all_ identified infants, regardless of degree of severity of loss.

2. Parental support to prevent secondary social and emotional stress relating to the defect.

In light of the recency of service delivery to hearing-impaired infants (in the U.S.), the preservice professional training of teachers available to serve the infant population appeared to be only moderately congruent with the competencies required for a family-oriented educational program.

It was believed that identification of the distinctive competencies required by teachers of the infant sub-population would be an initial step in addressing to the separate question of how these competencies might be acquired.

ORGANIZATION OF THE STUDY

The principle that working teachers of the hearing-impaired could subjectively evaluate the relative importance of competencies related to their work is adapted directly from earlier research studies[10,11,12] where competency committee members developed a list of knowledges and skills they considered essential.

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[9] The young deaf child:identification and management. _Proceedings._ International Conference, Toronto, Canada, October 6-9, 1964. Acta Otolaryngologica, Supplementum 206, Stockholm, 1965.

The population involved in this study was the teaching staff of every known infant program in the United States. The name and location were identified through preliminary questionnaires. There was a 100% response from 50 state consultants in each of the 50 states, and an 80% response from directors of speech and hearing centers in the United States.

One hundred and seventy programs were identified.

Questionnaires were also mailed to 12 experts in the field of education of hearing-impaired infants and preprimary children.

DATA GATHERING PROCEDURES

In January 1971 a cover letter and competency questionnaire was forwarded to one staff member in each of the 170 infant programs, through the administrator or director.

DEFINITION OF TERMS

A "teacher" was defined as an individual who: (1) holds professional certification (2) is providing direct service to hearing-impaired infants, 0-3, and their parents.

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[10] *Speech correctionist:the competencies they need for the work they do*. Bulletin No. 19. (Washington; U.S. Department of Health, Education and Welfare, 1957).

[11] *Teachers of children who are hard-of-hearing*. Bulletin No. 24. (Washington, U.S. Department of Health, Education and Welfare, 1959).

[12] *Teachers of children who are deaf*. Bulletin No. 6. (Washington, U.S. Department of Health, Education and Welfare, 1956).

An expert in education of the hearing-impaired infant, 0-3, was determined by the investigator to be a person who satisfies four or more of these criteria: (1) participation in one or more invitational conferences in the past five years addressing in whole or in part to the hearing-impaired preschool child or infant. (2) the author of one or more articles or books on the hearing-impaired infant, 0-3, which has been published in a professional journal or by a commercial publishing company. (3) presentation of one or more papers at a national or international meeting on the subject of the preschool hearing-impaired child. (4) supervisor or director of a service program for hearing-impaired infants. (5) recipient of a federal grant from the U.S. Office of Education to develop a Demonstration Home or an exemplary early childhood program for hearing-impaired infants. (N.B. The investigator qualifies as an expert by meeting all five criteria.)

A hearing-impaired child is "any child with a hearing loss which is handicapping educationally and developmentally. This term included children who may later be educationally classified as hard-of-hearing as well as those who may later be classified as deaf."[13]

DESIGN OF THE STUDY

The investigator undertook the initial development of a list of 77 competencies which were grouped under 5 major areas of professional responsibility:

1. Development of communication skills.
2. Physiology, audiology and acoustics.
3. Curriculum.
4. Home-school-community relations.
5. Psychological and sociological factors.

[13] Educational guidelines:a family-oriented preschool program for hearing-impaired children in Minnesota. Approved, State Board of Education, April, 1968.

In addition, desirable personal characteristics of the teacher were listed for participant reaction.

Independent examinations were made of the list of competencies by three specialists:[14] (1) education of the deaf. (2) speech audiology and otoloaryngology. (3) educational psychology. Their recommended modifications, additions and corrections were followed.

The same forced answer questionnaire sent to 170 teachers and 12 experts required only the circling of an appropriate number from 6 (high competence) to 1 (skill not required). Teachers were asked to make a determination of:

1. the relative value of each competence for effective performance on the job.
2. an estimate or rating of their own proficiency in each competence.

In addition, certain information was solicited concerning specific professional preparation and practicum experiences which might limit or accelerate the development of such competencies.

The 12 experts were asked to respond only to the extent of making personal judgment as to the relative importance of each competence to a teacher.

Standard statistical procedures were used to test whether the population means were different at the .01 significance level between measures of importance and proficiency for all teachers and on ratings of importance between all teachers and experts.

[14] Evelyn L. Deno, Ph.D., Professor of Special Education; Director, Psycho-Educational Center, University of Minnesota.
Frank M. Lassman, Ph.D., Professor of Speech and Otolaryngology; Director, Audiology Clinic, University of Minnesota.
Donald M. Moores, Ph.D., Associate Professor of Special Education; Director, Research and Development Center, University of Minnesota.

A rank order of the 77 competencies was determined for both the average ratings of importance and the average ratings of proficiency. When two items received identical average ratings, the size of the standard deviation determined the rank ordering. Thus the rank order number also served as an item identification number.

It was not expected that identification of the distinctive competencies required by a teacher of hearing-impaired infants would be fully realized in this single effort but that it would provoke subsequent discussion and expansion of thoughtful inquiry on the subject.

CLASSIFICATION OF RESPONSES TO QUESTIONNAIRE

There was a 100% response from the 12 experts, and all 12 questionnaires were usable.

I received a 92% response from the mailing to 170 teachers in 170 programs. (but not without considerable prodding, including two "nudge" letters and a second questionnaire).

33 (19%) respondents indicated they [illegible] no program for children below age 3. Three respondents (2%) had a infant program but no qualified teacher. Two questionnaires (1%) were not completed and thus unusable. A teacher from each of 119 infant programs in the United States completed questionnaires (70%) which were usable.

TRANSPARENCY NO. 1 - The range of setting was broad.

(Type of Organization Providing Service) Table 4:02

TRANSPARENCY NO. 2 - Professional Certification Presently Held.

1/4 were not prepared as teachers.

Only 22% had taken the major portion of specialized preparation to teach infants since January 1967 when practicum sites were available for hearing-impaired infants and focusing upon a demonstration home model.

TRANSPARENCY NO. 3 - Professional Title Preferred.

1/3 as parent counselor

1/3 as teacher

TRANSPARENCY NO. 4 - Primary Educational Setting in which Teacher Functions.

Only 22% with position responsibilities closely following the demonstration home model programs funded by the U.S.O.E.

35% following the traditional classroom model.

TRANSPARENCY NO. 5 - Certain Coursework.

A woeful 10% who had enrolled in none of the courses listed.

The wording of the course "Language Development" was unfortunate since it is a traditional course for teachers of the deaf.

If the words "Linguistics" or Language Acquisition by Young Children" had been substituted, the response might have been different.

TRANSPARENCY NO. 6 - Professional

This table relates only to the 87 respondents holding certification as teachers, not audiologists or clinicians.

A total of 23% only, had practicum experience with hearing-impaired infants, 0-3.

TRANSPARENCY NO. 7 - B.A. Degree (30 of the 119)

Only 3% listed nursery-kindergarten or early childhood education as a major or minor field.

TRANSPARENCY NO. 8 - M.A. Degree, all 119 respondents

A total of 5% listed nursery kindergarten or early childhood education as a major or minor field.

TRANSPARENCY #9 - Experts

The range of specialization is broad, and it should be noted that only 5 of the 12 had earned doctoral degrees. I was not one of them.

MAJOR FINDINGS

Teachers and experts generally agreed that a teacher should:

1. function as a member of an interdisciplinary team serving the infant and his family.
2. furnish a continuing program of parent guidance, counseling and education.
3. use an aural (listening) and oral method in providing a dynamic program of auditory training and language stimulation as well as an experiential, inductive approach to learning.
4. provide educational experiences with hearing children.
5. have knowledge of the stages of language acquisition in young children and the techniques and materials useful in teaching the "normal" infant.

6. be able to speak clearly and use interesting intonation patterns.

An intensive relationship with young children in a non-job related way was not deemed of high importance by either group.

Both groups viewed the knowledge or understanding of recent studies in linguistics and language acquisition, facts and theories of child development as items of only moderate value.

Competencies of Low Value: Both Groups

The ability to use the "sign" language, the manual alphabet (finger-spelling) and "cued speech" as methods in teaching the hearing-impaired infant appeared as three separate items on the list of 77 competencies and in each instance was rated as a skill not required. These methods consistently appear as the three competencies of lowest value on all tables showing rank order of importance according to ratings by experts and all teachers, and by sub-populations (B.A. and graduate degree) within the teachers' group.

Teachers and experts are less concerned with the ability to teach multi-handicapped infants and the use of structured approach to speech development. Both competencies received ratings of low value as did the ability to administer and interpret individual performance tests of mental ability and other appropriate tests offering a diagnostic profile of the child's social, visual, motoric and intellectual abilities.

The relatively low value indicated by both the teachers and experts for the ability to write behavioral objectives and to apply the principles of behavior modification and task analysis as well as to demonstrate knowledge and understanding of "models" in teaching styles and curricular planning in the execution of their daily work may reflect a present focus upon the hearing-impairment itself and the knowledges, skills and abilities necessary to its accommodation and remediation in the development of communication skills, rather than upon the ways in which young children learn.

Areas of Disagreement

Teachers placed more importance upon the ability to relate effectively to deaf parents of infants and to assume a leadership role in establishing community support of an educational program for hearing-impaired infants than did experts. They were more concerned with knowledge or understanding of basic science, professional literature and research relating to hearing-impaired infants and placed significantly more importance upon recent developments in theories and controversies on diagnosis and educational treatment of the hearing-impaired infant than the experts.

The ability to teach speechreading, utilizing knowledge of the materials and experiences which would assist infants in analyzing visual clues, was judged by teachers to be of significantly higher importance than by experts.

In contrast to the average ratings by teachers, the experts placed higher value upon basic scientific knowledge in the areas of physiology, audiology and acoustics, including the causes and treatment of deafness, auditory training as a science, and basic acoustics and acoustic phonetics as part of informational theory required for the design of appropriate auditory training activities than did the teachers.

RATINGS OF SELF-PROFICIENCY

Significantly lower ratings of teachers' self-proficiency were found in these critical areas of competence:

1. understanding of early child growth and development
2. current theories and controversies on diagnosis and educational treatment of the hearing-impaired infant.
3. ability to function as an interdisciplinary team member in designing a comprehensive parent program
4. knowledge of "models" in teaching styles and curriculum planning
5. ability to teach the multihandicapped infant

6. ability to assess the developmental status of infants through informal and standardized tests
7. ability to design an individually prescriptive program of auditory rehabilitation.

Teachers placed higher value upon the techniques and practices relating to the hearing-impairment and its amelioration and the development of communication skills, indicating less concern for the characteristics of normal child development and the ways in which young children learn.

Discrepancies

The need for a comprehensive program of parent support, accounted for five items in the ten competencies receiving highest ranking in order of importance. Yet one finds the knowledge or understanding of directive and non-directive counseling techniques in 51st place.

A similar discrepancy was noted between the ability to provide appropriate auditory and linguistic stimulation to an infant (6) and certain supporting competencies: understanding of recent studies in linguistics and language acquisition (45); auditory training as a science (63); the acoustic nature of speech (acoustic phonetics) and its application to a dynamic program of auditory training (70).

Educational Theory: Educational Practice

The keyword descriptors for computer retrieval today, as delineated in recent professional articles concerning the hearing-impaired infant, are 1) parent education, 2) an aural and oral method of teaching, 3) an experiential, inductive approach to learning, 4) early auditory training, and 5) group educational experiences with hearing children.

The teachers indicated by their ratings of these particular competencies that they placed a very high value upon each of these parameters of an educational program for the hearing-impaired infant and his family.

Yet oversimplification carries the risk of over-shoot and the consequence can be over-kill. It would appear from the study conclusions that the average teacher of hearing-impaired infants is not prepared for the work to be done. Seeming to operate on a medical model, the "disease of deafness," by their average ratings of importance, there is every indication that teachers believe testing is inappropriate and that identification and teaching of multihandicapped children is of low value as is the ability to apply principles of behavior modification and task analysis or to write behavioral objectives. "The child, not the method, is the book you read," Deno[13] observed.

Reviewing the competencies rated of moderate or low value, the investigator finds a chilling picture of superficial conceptualization of one educational prescription for all children with low importance placed on the items relating to sound educational theory: learning theory, language acquisition by young children; characteristics of preschool children and sound educational practices including: diagnostic testing, principles of contingency management; writing of behavioral or performance objectives and design of educational activities to reach them.

Cognition, Concept Development, Communication Skills

The inference from the average ratings of importance is that communication skill development is the singular "heart" of the educational problem which offers a limited interpretation of the concept "teach."

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[13] Evelyn L. Deno, Ph.D., Professor of Special Education; Director, Psycho-Educational Center, University of Minnesota, in a conversation with the writer, June 1971.

Adaptation of the Model

The first unanswered question, then, is how the model demonstration home or itinerant teacher programs, initiated in response to the rubella epidemic of 1964-65, can be replicated in modified and adaptable form to accommodate to the lower incidence of deafness identified among the infant population today. The implied assumption is that regionalization of services is required. This would, in turn, mandate the operation of educational services by an interdisciplinary team of specialists in the areas of curriculum, behavior management and evaluation as well as hearing, speech and language.

Public School Responsibility

Central to the consideration of regionalization of services is the fact that only 27 percent of the 119 identified programs for hearing-impaired infants in the United States were located in a public school, tuition free setting which permits the infant's community and its resources as well as his home and the public school building to be considered as potential sites in which learning may take place.

The investigator believes it is the inherent right of every hearing-impaired infant to be enrolled in a public school program, or in a facility under contract with the public schools, as soon as the diagnosis of hearing loss has been established and the psychological needs of the parents are at a peak. The cascade of educational services can then be tapped appropriately and a child transferred to a more suitable level of educational service ranging from integration in a nursery with hearing children to placement in a self-contained class with a group of hearing-impaired children as his experiential, social, intellectual and communication skills dictate.

Auditory Training

The aural and oral method of teaching hearing-impaired infants, 0-3, is solidly grounded on the scientific basis of psycholinguistics and acoustic and physiological phonetics.

The literature relating to physiological acoustics and informational theory is available to provide a scientific basis and rationale to teachers for the selection and implementation of certain activities designed to develop auditory attention, discrimination and memory of speech patterns by a hearing-impaired infant. The low average rating for certain underlying competencies (e.g., basic acoustics, acoustic phonetics, significance of residual hearing for educational programming) may well indicate that many teachers are not supplied with this scientific orientation during preservice and in-service training for application to the design and implementation of a dynamic program of auditory training activities.

Programs of Teacher Preparation

Present certification standards for teachers of the hearing-impaired are predicated upon inflexible measures of course titles and hours of credit. The pattern of responses by teachers in this study suggests the logic of reexamination of certification requirements by certifying bodies and redirection of focus upon required competencies, emphasizing behavioral skills, in each area of specialization. This option suggests an open document which would permit universities and colleges to design unique and individualized programs emphasizing interdisciplinary coursework taught in ways that make clear the relationship between theory and teaching method and their practical interaction. A combined emphasis upon early child development and special education would seem desirable to facilitate achievement in young children.

Table 4:02

Type of Organization Providing Service

Analysis	Number	Percent
Residential School: Hearing Impaired	17	14
Public School: Hearing-Impaired	32	27
Private Day School	16	13
Speech and Hearing Center	25	21
University: Speech and Hearing Services	9	7
University: Medical Center	3	3
Hospital-Based Program	8	7
University: Special Education	2	2
Diagnostic/Rehabilitation Center	7	6
Total	119	100

Table 4:03

Professional Certification Presently Held

Analysis	Number	Percent
Primary; "normal" children	2	2
Academic, Conference of Executives (only)	2	2
Teacher of hearing-impaired: general	16	13
Teacher of hearing-impaired infant: 0-3	3	3
Teacher of hearing-impaired: preschool, 3-6	15	12
Teacher of hearing-impaired: elementary grades	7	5
Teacher of hearing-impaired: k-grade 12	12	10
Teacher of hearing-impaired: birth to grade 12	25	21
Audiologist	14	11
Nursery-kindergarten teacher	5	4
Speech and hearing therapist, clinician or pathologist	18	15
Total	119	100

Table 4:04

Professional Title Preferred

Analysis	Number	Percent
Parent counselor/tutor	36	30
Educational audiologist	3	3
Teacher	43	36
Speech and language therapist, clinician . . .	18	15
Educational audiologist	8	7
Administrator	7	6
Audiologist	3	3
Communicologist	1	1
Total	119	100

Table 4:05

Primary Educational Setting in Which the Teacher Functions

Analysis	Number	Percent
Demonstration home setting	16	13
Classroom (day school)	42	35
Speech and hearing center	39	33
Itinerant role (home visitation)	10	9
Classroom (residential school)	8	7
Demonstration program: university or college	1	1
Demonstration program: medical center or hospital	3	3
Nursery	2	2
Total	119	100

Table 4:09

Teachers Who Have Not Enrolled in Courses by Area of Knowledge

Analysis	Number	Percent
Directive and non-directive counseling techniques	66	55
Preschool hearing-impaired children	50	43
Language development	24	20
Cognitive development	76	65
Behavior of preschool children	65	55
Psychological evaluation of infants and preschool children	90	77
Enrolled in none of courses listed above	12	10

Table 4:12

Professional Preparation Prior to Assumption of Present Position with Hearing-Impaired Infants, 0-3

Academic Training	Number	Percent
Early childhood education and practicum, normal infants, 0-3 years	0	0
Early childhood education and practicum, hearing-impaired infants, 0-3 years	8	9
Early childhood education and practicum with "normal" children, 3-6 years	6	6
Elementary education and elementary grades practicum, "normal" children	7	7
Elementary education and elementary grades practicum, hearing-impaired	27	32
Special education and practicum with hearing-impaired infants, 0-3 years	12	14
Special education and practicum with preschool "normal" children, 3-6 years	2	3
Special education and practicum with preschool hearing-impaired, 3-6 years	12	14
Special education and elementary grade practicum, hearing-impaired	5	6
Practicum in speech pathology and/or audiology	8	9
Total	87	100

Table 4:13

All Teachers: Bachelor's Degree, Highest Earned Degree
(N = 30)

Area of Specialization	Major N	Major %	Minor N	Minor %
Non-education major	1	3	7	23
Education of the deaf	8	27	5	17
Audiology	0	--	1	3
Speech and hearing	8	27	2	6
Elementary education	9	30	6	20
Special education	2	6	1	3
Nursery-kindergarten	0	--	0	--
Secondary education	0	--	1	3
Early childhood education	1	3	0	--
Psychology	1	3	1	3
No response			6	20
Total	30	100	30	100

Table 4:14

All Teachers: Master's Degree, Highest Earned Degree
(N = 86)

Area of Specialization	Major		Minor	
	N	%	N	%
Non-education major	1	1	4	5
Education of the deaf	29	34	4	5
Audiology	15	17	4	5
Speech and hearing	19	23	10	12
Elementary education	5	6	1	1
Special education	12	14	4	5
Nursery-kindergarten	2	2	1	1
Administration	1	1	6	6
Early childhood education	1	1	1	1
Educational psychology	1	1	12	14
No response	—	—	39	45
Total	86	100	86	100

Table 4:15

All Experts: Highest Earned Degree
(N = 12)

Area of Specialization	Master's Degree Major	Master's Degree Minor	PhD or EdD Degree Major	PhD or EdD Degree Minor
Non-education major/minor		1		
Education of the deaf	2			
Education (elementary)	1	1		
Audiology	1		3	
Speech pathology	2	1		1
Child study	1			
Educational psychology		4		
Psychology			1	1
Education			1	
Administration				1

Excerpt from:
COMPETENCIES NEEDED BY TEACHERS OF HEARING-IMPAIRED
INFANTS, BIRTH TO THREE YEARS OF AGE, AND THEIR PARENTS

Author: Winifred H. Northcott

(National Survey: 119 infant programs in the United States)

Table 4:16 Comparison of the Ratings of Importance of a List of 77 Competencies of Teachers with their Self-Ratings of Proficiency

Rank order of Importance	Competency	Rank Order of Proficiency
1sd[1]	Ability to provide parent information to encourage realistic acceptance of the infant's disability and its implications for educational services	3
2sd	Knowledge or understanding of the nature and substance of parent guidance, parent counseling and parent education as it relates to the hearing-impaired infant, 0-3, and his family	25
3sd	Ability to demonstrate confidence and competence in relating to other professionals, parents and infants	4
4sd	Ability to participate with other members of a professional team in designing and implementing a well-balanced parent education program	30
5sd	Ability to provide information to parents concerning the development of a stimulating home environment for cognitive and linguistic development	14
6sd	Ability to provide appropriate auditory and linguistic stimulation to an infant	19
7sd	Ability to design activities to encourage appropriate hearing, speech, performance, locomotion skills necessary to the development of receptive and expressive language	20
8sd	Ability to use an aural and oral approach in teaching the infant	8
9sd	Knowledge or understanding of the techniques and processes required to promote communication skills in the deaf infant	36
10sd	Knowledge or understanding of the sequential stages of language acquisition in normal children	29

Rank order of Importance	Competency	Rank Order of Proficiency
11sd	Knowledge or understanding of the components of comprehensive family-oriented program for a hearing-impaired infant, 0-3, and his parents	32
12sd	Ability to relate effectively to deaf parents of infants	17
13sd	Ability to provide parent information concerning the nature of the auditory defect and its implications for home training of residual hearing	12
14sd	Ability to identify individual differences in human growth and development during the first three years of life	26
15sd	Ability to implement a parent-teaching program to encourage the development of communication skills in the infant	31
16sd	Knowledge or understanding of the role of the parent in stimulation of residual hearing and development of communication skills	11
17sd	Ability to use the "natural language" approach to speech development and voice improvement	6
18sd	Ability to offer an atmosphere encouraging an inductive approach to learning through experiential activities in home or at school	1
19sd	Knowledge or understanding of the community health, education and welfare resources available to the infant and his family	7
20sd	Ability to work as a member of a team in designing an individually prescriptive educational program suited to the infant's needs and abilities	21
21sd	Ability to teach auditory attention, discrimination and auditory memory making use of common environmental sounds and activities	9

Rank order of Importance	Competency	Rank Order of Proficiency
22sd	Knowledge or understanding of methods, techniques and materials useful in teaching the "normal" infant, 0-3	45
23sd	Knowledge or understanding of the function and utilization of group and individual hearing aids	38
24 sd	Knowledge or understanding of the possible effects of the socio-economic conditions and emotional climate of the home on the infant's social, emotional and intellectual development	16
25sd	Knowledge or understanding of recent developments in theories and controversies on diagnosis and educational treatment of the hearing-impaired infant	48
26sd	Ability to contribute to community leadership in establishing an educational program for hearing-impaired infants	44
27	Ability to speak clearly and use interesting intonation patterns	2
28sd	Knowledge or understanding of contextual, experiential and linguistic cues required by young children in order to develop an auditory and visual linguistic system	49
29sd	Ability to derive educational clues from otological, audiological and other medical reports	22
30sd	Knowledge or understanding of facts and theories of child development	41
31sd	Ability to provide information to parents concerning the physical, social, emotional, intellectual characteristics of infants in the first three years of life	42
32sd	Ability to use systematic informal behavior observation as a means of estimating developmental status in cognitive, affective and social realms	46

Rank order of Importance	Competency	Rank Order of Proficiency
33 sd	Ability to draw educational interpretations from reports of social workers, audiologists, psychologists	24
34	Ability to help hearing-impaired infants use visual clues (speechreading) in analyzing a situation and in communication with others	18
35 sd	Knowledge or understanding of the perception of sound by infants with different degrees and types of hearing loss	47
36 sd	Knowledge or understanding of the findings of research studies which have a bearing on the educational, psychological and social status of the hearing-impaired	53
37 sd	Knowledge or understanding of the purposes and services and location of national organizations concerned with the general welfare and/or education of the hearing-impaired	13
38	Ability to identify materials, toys, equipment for young children	5
39	Knowledge or understanding of the significance of age of onset of deafness in parent and infant education	28
40sd	Ability to interpret necessary accommodations to the hearing-impaired infant to teachers of normally hearing children	10
41	Ability to operate group and individual amplifiers	15
42sd	Knowledge or understanding of the materials and experiences useful in encouraging speechreading by infants	35
43sd	Knowledge or understanding of the methods and techniques for adaptation of curriculum to the needs of multihandicapped infants	56
44sd	Knowledge or understanding of the significance of the amount of residual hearing for educational prescription	40

Rank order of Importance	Competency	Rank order of Proficiency
45	Knowledge or understanding of recent studies in linguistics and language acquisition	63
46sd	Ability to initiate placement of a hearing-impaired infant in a regular hearing nursery and provide support services to the staff	39
47sd	Knowledge or understanding of basic science, professional literature, research relating to hearing-impaired infants	51
48sd	Ability to assess a child's coping skills relative to the requirements of a specified task demand	54
49	Knowledge or understanding of the measurement of hearing	23
50	An intensive relationship with young children in a non-job related way	34
51sd	Knowledge or understanding of directive and non-directive counseling techniques	59
52sd	Ability to utilize behavior modification techniques to influence inappropriate behaviors of the infant (e.g. passive, hostile, manipulative, indifferent)	52
53	Ability to identify sources of special education materials, toys and equipment for hearing-impaired infants	27
54sd	Ability to select appropriate tests offering a diagnostic profile of the child's social, visual, motoric and intellectual abilities	71
55sd	Ability to give "first aid" to hearing aids	50
56sd	Ability to make a systematic analysis of a performance demand in terms of the hierarchy of skills required to accomplish it	68

Rank order of Importance	Competency	Rank order of Proficiency
57sd	Ability to teach hearing-impaired infants with multiple atypical conditions such as mental retardation, visual loss, giftedness, emotional disturbance, orthopedic involvement	67
58	Ability to interpret educational programs for and the problems and abilities of the deaf to non-professional school workers such as teacher aides, bus attendants and school custodians	33
59sd	Ability to encourage an infant s initial use of prosodic patterns (intonation, stress, etc.) as a linguistic feature to generate statements, questions, imperatives prior to intelligible speech	57
60 sd	Knowledge or understanding of "models" in teaching styles and curriculum planning (developmental-curricular; behavioristic-curricular; parent-training-curricular)	65
61sd	Knowledge or understanding of the factors involved in fitting hearing aids	60
62sd	Ability to administer and interpret diagnostic measures of auditory-vocal and visual-motor functioning	72
63sd	Knowledge or understanding of auditory training as a science	58
64	Knowledge or understanding of the anatomy and physiology of the speech and hearing mechanisms and their disorders	43
65sd	Ability to write behavioral objectives designed to influence terminal behavior in teacher, learner and parent	61
66sd	Ability to interpret test data: individual intelligence tests	70
67	Knowledge or understanding of the causes and treatment of deafness	37
68 sd	Knowledge or understanding of basic acoustics	64

Rank order of Importance		Rank order of Proficiency
69sd	Knowledge or understanding of transmission of sound through electronic equipment	66
70sd	Knowledge or understanding of acoustic phonetics (acoustic nature of speech, including differential harmonic analysis of phonemes, etc.) and its application to a dynamic program of auditory training	69
71	Ability to administer pure tone audiometric tests to hearing-impaired infants	62
72sd	Ability to use a structured approach to speech development and voice improvement	55
73sd	Ability to administer and interpret individual performance tests of mental ability to hearing-impaired children	74
74sd	Knowledge or understanding of the basic theory of electronics as applied to amplifiers and hearing	73
75	Ability to use "sign" language in teaching the infant	76
76	Ability to use the "manual" alphabet (fingerspelling) in teaching the infant	75
77sd	Ability to use "cued speech" in teaching the infant	77

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[1] sd denotes "significant difference" at the .01 level. For items marked with this symbol, analysis showed a statistically significant difference between the average rating of importance and the average rating of proficiency.

Mrs. Wilma Shaw

CEC CONVENTION NOTES

The Role of the Classroom Specialist

The role of the classroom specialist is to arrange in-service learning experiences for teachers who have referred problem situations. This role is further defined in that the shared objective of the teacher and specialist is the modification of problem situations by the teacher, in the classroom. At no time does the specialist provide direct service to a child, unless it is to demonstrate a technique or material for the classroom teacher.

In-service learning experiences may derive from any of the basic steps included in the diagnostic-prescriptive process. For our purposes, we may classify such experiences in the following way: phase 1, pinpointing; phase 2, formulating strategy and specifying tactics; and phase 3, implementing and evaluating the modification plan. The placement of implementation and evaluation together within this last phase signifies that these two processes should occur simultaneously.

(In-Service Experience Process)

The function of the classroom specialist may be best understood by tracing the in-service experience process itself through each of these phases. Upon referral, the classroom teacher and specialist work together to pinpoint or identify pertinent elements of the problem situation. In the area of diagnosis, for example, the teacher and specialist might together investigate the sequence of decoding skills in beginning reading. Further pinpointing might then involve the assessment of a student's entering behavior in each task of this sequence, and subsequent definition of behavioral objectives for that student. If the problem situation is one of behavior management, the classroom specialist might provide some guidelines for observing and pinpointing problem behaviors. He might further provide the classroom teacher with the counting and recording tools necessary to collect preliminary data. In the area of classroom organization, the specialist might provide some criteria for math grouping and help the teacher define his instructional objectives for each participating child. In each of these instances, the teacher gains experience in pinpointing--specifying the characteristics of the problem and, in so doing, learns which questions to ask and what information to use in formulating pinpointing questions. Throughout this first phase, as in the others to follow, the classroom specialist's role is determined by the stated needs of the teacher. In some instances, the specialist might actually participate in the pinpointing process, while in others he might only suggest some pinpointing strategies to be tried.

At this point some of you may be wondering what is meant by the "stated needs of the teacher."

The problem situation referral will certainly define teacher needs to some extent. But this may not always be enough. The specialist's response should be directed toward the specific questions or requests of the teacher. Let's take the example of a problem situation referral which states simply that "Tina is a disruptive influence during math practice time. She doesn't complete her own work and keeps others from doing theirs." Although Tina's competence in math may indeed be involved here, the classroom specialist should direct her immediate training response to the problem which the teacher has referred--Tina's disruptive behavior. If in the process of modifying this behavior, the specialist suggests a strategy which simultaneously builds Tina's math skills--the teacher and student may both benefit. The point is, the classroom specialist should not respond to this problem situation by redefining it according to her perceptions--unless specifically requested to do so. Our primary goal is to start where the teacher is and work gradually toward self-sufficiency according to her needs as she perceives and defines them.

Once the characteristics of the problem situation are identified, the teacher and specialist would then evaluate a number of strategies which might be used to modify the problem situation. Specific tactics might then be developed according to student performance goals. Once again, the role of the classroom specialist varies according to the teacher's stated needs. In almost all situations, however, perhaps the most important function of the classroom specialist during this phase is to obtain for the teacher pertinent information concerning the effectiveness of the strategies and materials being considered. If the teacher is better informed about the advantages and disadvantages of the various alternatives, he will be better equipped to choose strategies and tactics which will provide success for himself and his students. An important outcome of this phase then is the development of teacher awareness of research information and its applicability in classroom practice.

Having determined a strategy and developed tactics to modify the problem situation, a teacher is now ready to implement his plan. The classroom specialist may serve in several capacities during this phase--demonstrating the use of materials or modeling an instructional technique for the teacher. The primary role of the specialist at this point, however, is to encourage and assist the teacher in evaluating the effectiveness of his plan. Is the plan which is being implemented successfully modifying the problem situation? And how is it affecting student performance? (magnitude and duration of change) A number of evaluation methods may be considered by the teacher and specialist. The basic criterion however should be student performance. The specialist may then provide the necessary equipment and materials for evaluation. Perhaps this phase of in-service experience is the most crucial in teacher learning; for without evaluating one's tactics, in terms of student performance, a teacher cannot determine the effectiveness of his decisions and implementation skills. The evaluation tools he selects or designs should tell him which elements of his plan are working effectively and which are not. Without some measure of effectiveness, the entire in-service experience might be wasted. The classroom specialist encourages such evaluation and assists in analysis of data and subsequent modification of tactics.

We have traced the full cycle of a problem situation referral. It is important to note that certain steps within this process may be eliminated according to the teacher's needs, and in-service experience provided only in those areas requested by the teacher. While one teacher might refer a problem situation at the first phase of the process (pinpointing), another might successfully have specified the characteristics of the problem and now need information and in-service experience concerning strategies and tactics. Another staff member might request experience in pinpointing, proceed with the next phase independently, and then request in-service experience in the evaluation phase, while she is implementing her plan. As was mentioned earlier, one characteristic of the in-service strategy is the gradual progression toward teacher self-sufficiency. It is the classroom teacher who determines those areas in which the specialist and in-service experience might be most useful to him.

Teachers' stated needs should likewise determine the classroom specialist's schedule. In some instances he or she might be devoting 15 minutes daily to one problem situation, three hours weekly to another. The specialist might also evaluate referrals and identify similar needs for in-service experience so that group training opportunities might then be arranged. Such group sessions would allow for in-staff sharing of competencies as well. The specialist might further work out a system to inform staff members concerning problem situations, strategies tried, and student performance results. Although these may be constructive aspects of his role, the primary focus of the classroom specialist is the problem situation referral process.

By arranging for and participating in in-service learning experiences, the classroom specialist is an agent in the progression toward teacher self-sufficiency in the basic skills.

Now, a very appropriate question occurs to us at this point. What happens when this objective is achieved? The role of the specialist must then necessarily change. That is to say, the classroom specialist is not intended to be a permanent fixture within a building. Having reached the stipulated objective, the specialist might undertake a new building assignment. Or he might function for a number of buildings or an entire district as a consulting person only. Or he might function as an administrative person, arranging sharing of competencies in those district areas which have already undergone in-service experience. The point is that the classroom specialist's role will change according to need.

(Competencies)

Having some idea of the plan and how it works, one becomes concerned with the problems of implementation. Where might we find the personnel to affect such a program? And what skills must one have to successfully meet the role demands of the classroom specialist?

Obviously, the role of classroom specialist requires a high degree of professional competence. The kind of situations usually referred by classroom teachers require that a specialist be competent in:

(1) analysis of the task sequence in each of the basic skills areas

(2) diagnosis in basic skills

(3) instructional techniques

(4) classroom organization and arrangements (scheduling, grouping, individualization...)

(5) behavior management

(6) evaluation: in the area of evaluation, he should be especially skilled in the use of systems for measurement and recording of student performance data.

He should also be knowledgeable in cirricula materials, practice and independent learning activities.

In addition to these professional competencies, one might hope that the specialist demonstrate some necessary inter-personal skills. Competence in relating to and communicating with peer-professionals is one such desirable quality. Secondly, the specialist should demonstrate confidence in classroom teacher ability and the concept of teacher self-sufficiency. Furthermore, while he must consistently communicate and represent the criteria for acceptable performance, the specialist must also realize that there will be various levels of teacher performance and that he must accept and make provision for these approximations of his standard. Without this realistic attitude, the classroom specialist cannot be a flexible and effective teacher trainer.

The combination of professional competence and inter-personal skill characterizes the classroom specialist. Where might we find candidates for such a position? Persons demonstrating these competencies are already available. Many are currently employed as special or regular classroom teachers. Those of you who are administrators may have already identified some of your special service personnel as fitting the classroom specialist profile. In addition, numerous university programs are developing in-service or graduate training models which emphasize these very competencies. One such program in particular is "Consulting Teachers in Training" at the University of Vermont. The point is, viable candidates for the position of classroom specialist are to be found within the immediate area of almost any school district...and with the administrative arrangement proposed, at no additional expense to the building or district which ventures to try this program. One problem should be accounted for here. Candidates may demonstrate particular skills deficits in one or more of the competency areas cited. Training of the classroom specialist should be provided where necessary in order to raise the level of professional competence. Workshops, in-service opportunities, independent study, specialists' sharing of competencies---all might be useful means of assisting the specialist in achieving his objectives.

In summary, the role of the classroom specialist is to arrange in-service learning experiences for teachers who have referred problem situations concerning basic skills or behavior management. Throughout each phase of the diagnostic-prescriptive process, the classroom specialist's role is determined by the stated needs of the teacher. Any modification plan developed by the teacher and specialist must be an "in the classroom" strategy implemented by the classroom teacher. By arranging for and participating in in-service learning experiences, the classroom specialist is an agent in the progression toward teacher self-sufficiency in the basic skills.

Mrs. Wilma Shaw

Small Group Session

I. Opening Tactics

Although the administrative arrangement terminating special services induces teachers to refer problem situations, an entering behavior strategy which demonstrates the immediate usefulness of in-service experience might initially gain acceptance of the classroom specialist and the program. Teachers might be asked, prior to school opening, to submit one problem statement or question relating to their first day (or week) of classes. Questions might refer to classroom organization and arrangement, informal diagnostic procedures or screening techniques or any other area which seems to pose a problem during the first week of school. The classroom specialist then suggests a number of ways to deal with the problem referred and requests each teacher submitting a problem situation to try one of the classroom specialist's suggestions and discuss the results with the specialist. Such a strategy, providing it is adequately structured and question areas well-defined, could provide immediate assistance to a teacher at a time when it is needed by most, and initiate a working relationship with the classroom specialist which is directed toward a teacher-identified problem situation. The role of the classroom specialist and the process of in-service experience must be understood by all staff members. Although this understanding will develop as in-service experience is demonstrated throughout a school building, there should be clear and ample communication regarding objectives and process before school begins.

Another strategy...idea bank, to be used in conjunction with opening tactic to demonstrate competence of cs to teachers reluctant to refer problem situation.

II. Opening tactic suggestions from audience (written)

III. Questions

IV. Activity: Describe a skills need which you have experienced on the part of regular classroom teacher(s); or while functioning as a special educator. (written)

I will demonstrate the way in which CS might arrange an in-service learning experience to meet this need.

TRAINING CONSULTING TEACHERS

by

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MAY 1 1972

This paper includes the information presented by Hugh S. McKenzie at the 50th Annual International Convention of the Council for Exceptional Children, Washington, D.C., March 19-24, 1972.

TRAINING CONSULTING TEACHERS

by

Wayne L. Fox, Edward M. Hanley, Hugh S. McKenzie

The Special Education Program at the University of Vermont trains Consulting Teachers (CT's) to provide special education services within regular elementary classrooms through consultation with classroom teachers, school administrators, and the parents of eligible children. Accountability for the child's progress is shared by the regular classroom teacher who directly provides special services with assistance from CT's. The consulting teacher approach to special education has been endorsed by the Vermont State Department of Education and agrees closely with recent national trends in special education (Deno, 1970; Lilly, 1970, 1971; Dunn, 1968).

A child in a regular elementary classroom is eligible for special education services provided by a CT when the following criteria haven been met*.

1. The child's teacher refers the child to the CT. This referral _must_ include a statement indicating deficits in language, arithmetic, and/or social behaviors and

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* Justification for this definition of eligibility has been submitted to the Bureau of Education for the Handicapped - "Dimensions of the Population Served by the Consulting Teacher Program, with Data indicating That These Dimensions Pertain to a Large Majority of Children Served by the Program." The Special Education Program, College of Education, University of Vermont, October 12, 1971.

a statement signed by the teacher indicating that the referred child has a need for CT services.

2. Measured levels of language, arithmetic, and/or social behaviors which the referring teacher has indicated as deficits must deviate from specified minimum acceptable performance levels.

The consulting teacher approach is based upon a behavioral model of education. (McKenzie, 1971; Fox, 1972). As Hanley (1970) has indicated, the behavioral model has been a potent tool for the modification of problem behaviors. Figure 1 represents a schematic of the model for serving children eligible for special services within regular classrooms. In short, once a child has been referred to a CT because of a deficit in language, arithmetic and/or social behaviors, the CT first determines the child's entry (operant) level for the referred behaviors. The CT then assists the classroom teacher to specify the behavioral enabling objectives which are precise statements of where the child should be at the conclusion of each step of the instructional sequence. The next step involves the development and implementation of a teaching/learning procedure including appropriate consequences for classroom learning. Finally, the CT and classroom teacher specify procedures for a continuous evaluation of the child's progress toward the specified behavioral objective.

TRAINING PROGRAM

The Consulting Teacher Program is a two-year (including one summer) training program which culminates in a Master of Education

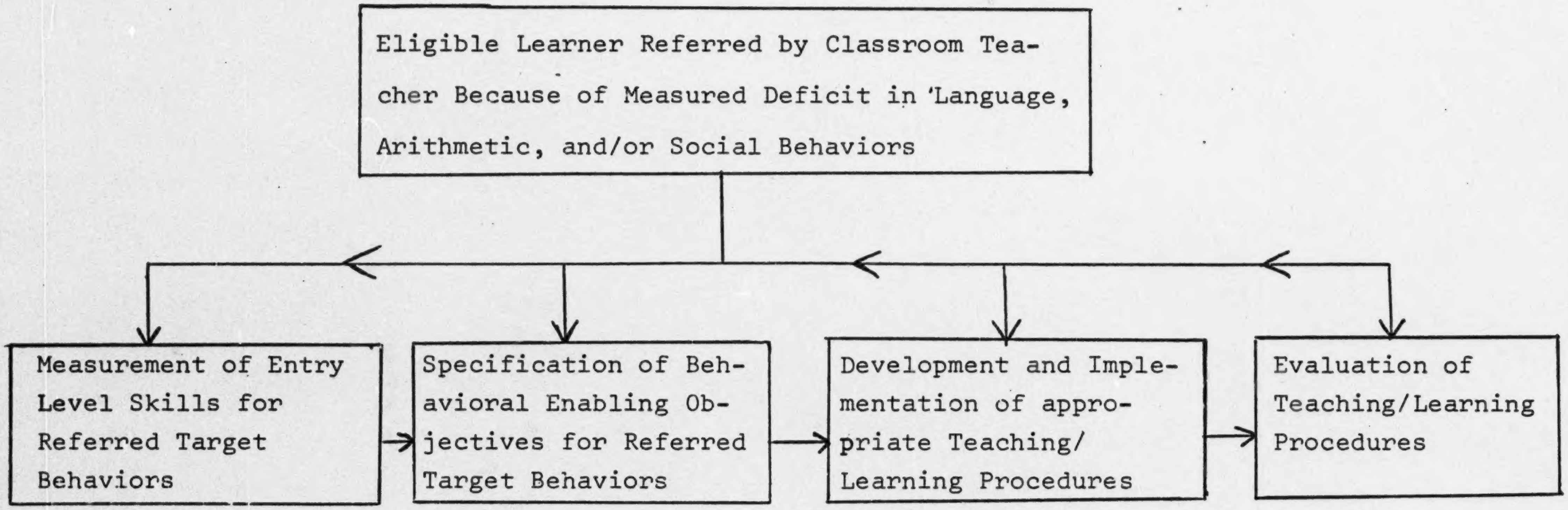
Eligible Learner Referred by Classroom Teacher Because of Measured Deficit in Language, Arithmetic, and/or Social Behaviors
Measurement of Entry Level Skills for Referred Target Behaviors
Specification of Behavioral Enabling Objectives for Referred Target Behaviors
Development and Implementation of appropriate Teaching/Learning Procedures
Evaluation of Teaching/Learning Procedures

Figure 1. Model for providing special education services to eligible children within regular classrooms.

degree and recommendation for Vermont certification as a CT. The program is supported by the University of Vermont; the Vermont State Department of Education; local participating school districts, and the U.S.O.E., Bureau of Education for the Handicapped, and Bureau of Education Personnel Development.

Since 1968, the training of CT's has provided special education services to more than 600 eligible children within regular classrooms in Vermont. In addition, more than 300 regular classroom teachers have received training from Consulting Teachers in Training (CTIT's) through formal coursework, workshops and/or direct consultation.

CTIT's beging their training during a six-week summer session and continue their coursework and practica at the University during the subsequent year. The second year consists of a full-time internship in a Vermont school district. The student spends the major portion of his time in the schools consulting with regular classroom teachers under the close supervision of program faculty. Formal coursework, in the traditional sense, is kept at a minimum.

TRAINING CONTENT

The consulting Teacher Program staff, in the Spring of 1970 carried out an analysis of tasks routinely performed by CT's. The primary purpose of the task analysis was to identify competencies that might be critical for successfully consulting with classroom teachers to serve eligible children within the regular classroom. The task analysis was also used to provide a basis for determining those CT behaviors which might be better learned in formal coursework, in a classroom practicum setting, or on the job through experience after the completion of training.

Tasks which CT's judged to be an integral part of successfully working with children eligible for special education services were further analyzed and seemed to fall roughly into four categories: (1) individualizing instruction; (2) the analysis of classroom behavior; (3) the evaluation, adaptation, and application of research for classroom use; and (4) consulting with other educational personnel including the parents of eligible children.

The program staff developed four learning modules based upon the four task categories. Modular objectives describing the terminal competencies required of consulting teachers were then derived and specified as follows:

Consulting/Training Module (C)

The student will demonstrate his ability to consult with teachers, parents, and school administrators to help them serve 32 children eligible to receive special education services as demonstrated by measured behavioral changes in these children.

The student will prepare practica involving applications of individualizing instruction and the analysis of classroom behavior acceptable to the University of Vermont Special Education Program as 12 graduate credit hours toward an inservice Master of Education program to prepare master teachers with special education skills.

The student will make formal and informal presentations describing the training of consulting teachers, the role of the consulting teacher in the school, data from service projects performed by the student and consultees, and other related topics when called upon to do so. Presentations may be given for various special interest groups, school personnel and other professionals.

Individualizing Instruction Module (II)

The student will demonstrate his ability to help classroom teachers develop individualized sequences of instruction in the major areas of the elementary curriculum with priority given to language and arithmetic behaviors. Sequences must include measurement of entry level skills, derivation and specification of instructional objectives, selection of relevant learning materials, and measurement of pupil progress. Sequences of instruction must be implemented with children eligible for special education services, and must include reliable data indicating successful completion of the sequences. A written evaluation of one instructional sequence must be presented to and approved by faculty.

The Analysis of Classroom Behavior (AB)

The student will demonstrate his knowledge of the terminology and principles of the analysis of classroom behavior by helping teachers and parents modify the behaviors of eligible children in the classroom setting as demonstrated by reliable measures of learners' behaviors. These applications of the analysis of classroom behavior will focus on:

a. reinforcement principles
b. scheduling of reinforcement
c. shaping behavior
d. the effects of the antecedent stimuli on behavior

Research Module (R)

The student will demonstrate his ability to evaluate research relevant to the education of children eligible for special education services according to the following criteria: applied, behavioral, analytic, technological, conceptual, effective, and generality (Baer, Wolf, and Risley, 1968*).

The student will demonstrate his ability to adapt research meeting the above evaluative criteria to permit application of the research procedures to accelerate the progress of eligible children.

Through consultees, the student will demonstrate his ability to apply adapted research to accelerate the progress of eligibile children with regular measures of learners' behavior to reflect the effectiveness of the adaptation.

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*Baer, D.M., Wolf, M.M., and Risley, T.R. Somme current dimensions of applied behavior analysis. Journal of Applied Behavior Analysis, 1968. 1. 91-97.

Within each learning module, one or more specific and/or generalized tasks were identified. A generalized task required common skills that would be useful in more than one specific task. Once the learning modules and generalized and specific tasks had been identified, instructional units were designed to enable the students to acquire each task and thus eventually attain the modular objectives. Each instructional unit contained a specific instructional objective, a list of suggested references, suggested activities which might help the student achieve the enabling objectives, and a practicum requirement if appropriate. All units were designed to be self-paced and not all students were expected to complete every instructional unit.

Below is an example of one instructional unit in the Individualized Instruction Module. This particular instructional unit requires that the student develop procedures for accelerating the progress of at least one learner in word recognition, reading accuracy, and comprehension.

Special Education Program University of Vermont

INDIVIDUALIZED INSTRUCTION MODULE

Reading Procedures

Instructional Objective:

The student and a partner of his choice will work together to develop and administer the reading procedures for word recognition, oral reading accuracy, and comprehension described in the paper by Burdett and Fox (1971). The student and his partner will be required to:

1. develop and administer an entry level test in word recognition, oral reading accuracy, and comprehension to at least one learner attending the Summer Development Class.

2. prepare the necessary learning materials for the word recognition, oral reading accuracy, and comprehension procedures.

3. prepare the necessary data sheets and graphs for the word recognition, oral reading accuracy, and comprehension procedures.

4. administer the word recognition, oral reading accuracy, and comprehension procedures to at least one learner from the Summer Development Class for a minimum of 10 sessions. The student's partner must provide reliability measures for the different procedures in a minimum of five of the sessions.

5. prepare a graph for each procedure showing the pupil's performance across the 10 sessions.

6. prepare an evaluation and critique of the reading procedures for word recognition, oral reading accuracy, and comprehension.

References:

Burdett, C.S., and Fox, W.L. Reading Procedures. Burlington, Vermont: Special Education Program, College of Education, University of Vermont, 1971.

Egner, A.N., and Fox, W.L. Observation and Measurement of Classroom Behavior. Burlington, Vermont: Special Education Program, College of Education, University of Vermont, 1971.

Activities:

1. Data sheets for word recognition may be obtained from the summer school secretary. Sample word lists, word cards, oral reading accuracy data sheets, comprehension data sheets, comprehension questions, etc., may also be obtained from your instructor.

2. There will be several discussions concerning reading procedures and measurement scheduled at various times during the summer program. Exact times and dates will be announced in advance. It is recommended that students plan to attend these discussions.

In addition to the modules, CT interns' objectives during the second year of full-time study must achieve the following specific enabling objectives to successfully complete the internship and be recommended for Vermont Certification as a CT:

> The intern will provide service to 20 children eligible for special education services and the parents of these children in the internship school district through training of, and consultation with, classroom teacher.
>
> The intern will establish a consulting teacher office including training of a consulting teacher aide, setting up office procedures, and establishing referral and data systems in the internship school district.
>
> The intern will develop an individual study program to include an approved list of references in two or more of the following categories: behavior analysis, school and society, the classroom, home consequences, consulting, and other approved categories.
>
> The intern will prepare instructional units for an inservice M.Ed. program as an adjunct professor of the Special Education Program of the University of Vermont. Coursework must include 12 semester hours of laboratory experience in special education.
>
> The intern will prepare and submit the required credentials and materials to the Board of Consulting Teacher Examiners for Vermont certification.

Currently there are three projects conducted by program faculty which afford students additional opportunity to apply analytic and consulting skills: 1) a parent workshop for parents with severely handicapped children (Hanley, 1971); 2) an Essential Early Education project to identify preschool children with learning problems (Knight, 1971); and 3), a project to explore the feasibility of training CT's for secondary schools (Paolucci and Abruscator, 1971). In addition, after completion of the first full year of training, students are offered summer positions as Summer Development class teachers for eligible children.

TRAINING PROCEDURES

Each student, upon acceptance to the Consulting Teacher Program, is assigned a Studies Committee. The composition of each Studies Committee includes a CT whose primary responsibility is internship supervision, and a behavioral consultant whose main responsibility is research and course development. The student is chairman of the studies committee and may call meetings at his discretion; however, a minimum of six meetings is held during each academic year. The student's progress toward attainment of program objectives is examined during these meetings. It is the responsibility of the Studies Committee to see that instructional units are appropriately sequenced depending upon the student's strengths and weaknesses. The student's rate of unit completion is also carefully monitored to assure that he will attain minimum objectives within the time limits of the program (two years).

The training procedures developed by the Consulting Teacher Program represent modifications of procedures described by Keller (1966, 1967, 1968a, 1968b), Cohen and Filipczak (1968), and Ferster and Perrott (1968). Instructional units are designed to be self-paced as long as the student maintains a minimum rate commensurate with the two year program. Units are sequenced for each learning module and students may work on different modular sequences of units concurrently, but typically do not work on more than one unit in a particular sequence at the same time.

An instructional unit is completed when a student has demonstrated in an oral examination that he has achieved the ojbectives specified in the unit. Unit objectives typically require written responses, practicum application, and oral defense of written responses. The unit objective may also serve as a pretest. A student who has already attained mastery of the unit objective may immediately schedule the oral examination. It is impossible to fail an instructional unit. The only grades given in the program are "pass". Since "pass" is at a mastery level (90% or above), it is interpreted as a grade of "A" for the University registrar.

One skill that every CT must master is that of written communication. Every instructional unit requires that a student produce clear, grammatically correct written responses before scheduling his oral defense. A poorly written response is required to be rewritten just as an incorrect response is.

Students are encouraged to work as a team as they progress through the instructional units. They are also encouraged to develop arguments and practice their oral defense of each unit with one another before scheduling the examination over the assigned unit.

CTIT's begin the training program in the summer with a six-week summer session that is held in conjunction with a Summer Development Class for eligible children in grades K-6. Typically, 50-60 other special and regular elementary classroom teachers also attend the summer session.

The summer session is designed to introduce the CTIT's to the consulting process and to provide them with their first opportunity to apply the principles of behavior analysis in a practicum setting. Each CTIT is responsible for the development and implementation of a learning procedure for one child with a measured deficit in language or arithmetic behavior. In addition, each CTIT assists two other regular or special class teachers to develop and implement learning procedures for two other children.

During the first academic year of training, CTIT's spend approximately 20 hours per week in local school districts under the direct supervision of CT's. Instructional units are designed to integrate the practicum assignments with weekly seminars and individual student/staff conferences.

The units in each module gradually require more sophisticated responses from the students as they gain experience in applied behavioral analysis. For example, early instructional units in the analysis of classroom behavior module require written definitions and simulated responses to case studies. Later units require that the student demonstrate application of basic principles. One student recently completed the following project as a required component of a final instructional unit covering the classroom application of positive reinforcement.

Jill[1], a six-year old first grader in a rural Vermont elementary school was referred to the CTIT for special education services because of an apparent inability to learn beginning word sounds. Because of this behavioral deficit she was already far behind her classmates in reading.

[1] This project was conducted by Anita Rivard, a CTIT under the supervision of Betsy Schneider and Edward Hanley.

The CTIT assisted the classroom teacher to develop and implement a flashcard procedure that was designed to teach Jill the beginning word sounds. One of the letters of the alphabet was printed on each flashcard. The teacher presented the flashcard to Jill and said a word aloud beginning with that particular word sound. The teacher presented Jill with four different flashcards, a total of three times each in succession, during each session. If the child correctly named the letter presented on the flashcard on three consecutive presentations, the letter was considered "learned" for that day. When Jill met the criterion of three consecutive correct responses on two successive days the letter was retired and a new one added to take its place.

The purpose of the project was to study the effect of positive consequences on Jill's performance. After 12 days of Baseline measurement under the above conditions the CTIT assisted the teacher to implement a contingency for correct responses. Jill was told that for each new word sound that she "learned" during a session she could earn one point. Each point represented minutes of free time for the entire class immediately following the learning session. The amount of free time varied according to the number of new sounds introduced daily so that Jill could never earn more than 10 minutes of free time for the class.

After seven days of the above procedure, a second contingency was implemented for the remainder of the project. Rather than earn free time for the entire class, the procedure allowed Jill to earn free time for herself only. For every point earned she was allowed to go to the learning center for a specified period of time (again never more than 10 minutes).

Figure 2 shows the results of the study. During sessions 4, 8, 14, 18, and 23 a second observer independently recorded responses during the flashcard procedure with 100% reliability. During the 12 days of Baseline Jill learned three beginning word sounds to criterion. During Contingency$_1$, when Jill was earning free time for the entire class, she learned eight new sounds in seven days. Finally, during Contingency$_2$, when Jill was earning free time for herself only, she learned the remaining nine new beginning word sounds in five days.

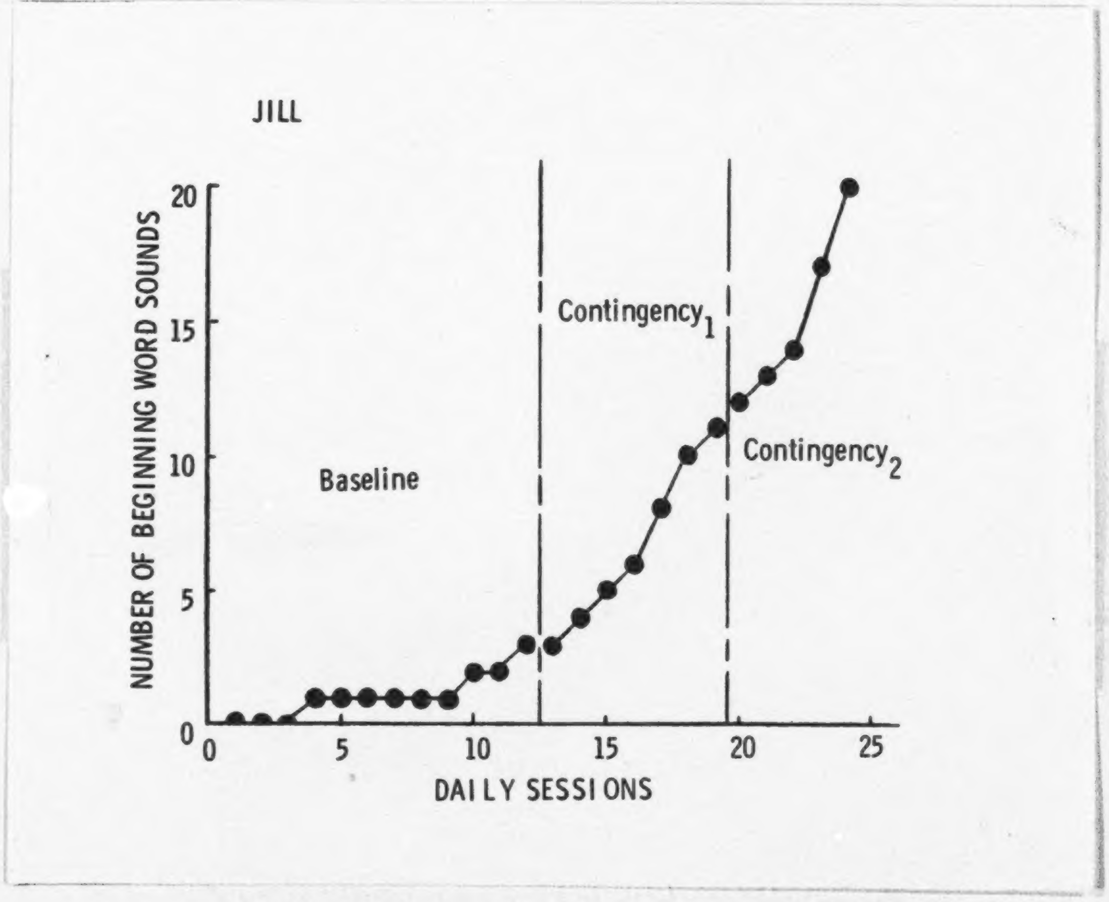

Fig. 2. The cummulative number of beginning word sounds learned to criterion under baseline, and contingency conditions.

Another CTIT taught her 20 month-old mongoloid girl to walk as part of the requirements for completing the instructional units on behavior shaping[2]. Children exhibiting Down's Syndrome typically show retarded physical development and exhibit poor muscle tone. Amy was 30 inches tall and weighed 18½ pounds. Her family had exercised her frequently and Amy was able to walk supported by others. She was also able to pull herself up and walk supported by a table or other object. At the time of this study Amy had not taken an unsupported step and when coaxed to do so, would sit down on the floor. Examination by a pediatrician revealed no physical abnormalities that would prevent walking.

The CTIT adopted the shaping procedures used by Meyerson, Kerr & Michaels (1967) to Amy's home environment. Two chairs were placed facing each other with the two parents astraddle each chair. During the first training session the chairs were placed 18 inches apart, just far enough apart for Amy to stand holding onto both chairs and turn from one to another without losing support. Each session was seven minutes long as measured by a kitchen timer that was set when the session began. The CTIT recorded the number of unsupported steps made by Amy during each session.

When Amy was positioned between the chairs the parent behind her would say, "Amy, come here!" If Amy followed the command she was reinforced with an edible (ice cream). The parents alternated commands until Amy was making the transfer from one chair to another. As soon as the basic response was established the distance between chairs was gradually increased until Amy had to move unsupported from one chair to the other. The greatest distance between chairs reached in one session was the starting distance for the next session. On the final session with the chairs the distance between chairs was 70 inches.

---

[2] This study was performed by Alice Angney, a CTIT in the program, under the supervision of Edward Hanley. The study was performed in the home with parents as experimenters and siblings as second observers.

On five occasions a second observer independently recorded the number of unsupported steps taken by Amy with always more than 90% agreement.

Figure 3 shows the results of the shaping procedure. The arrow on the graph indicates when the chairs were removed from the

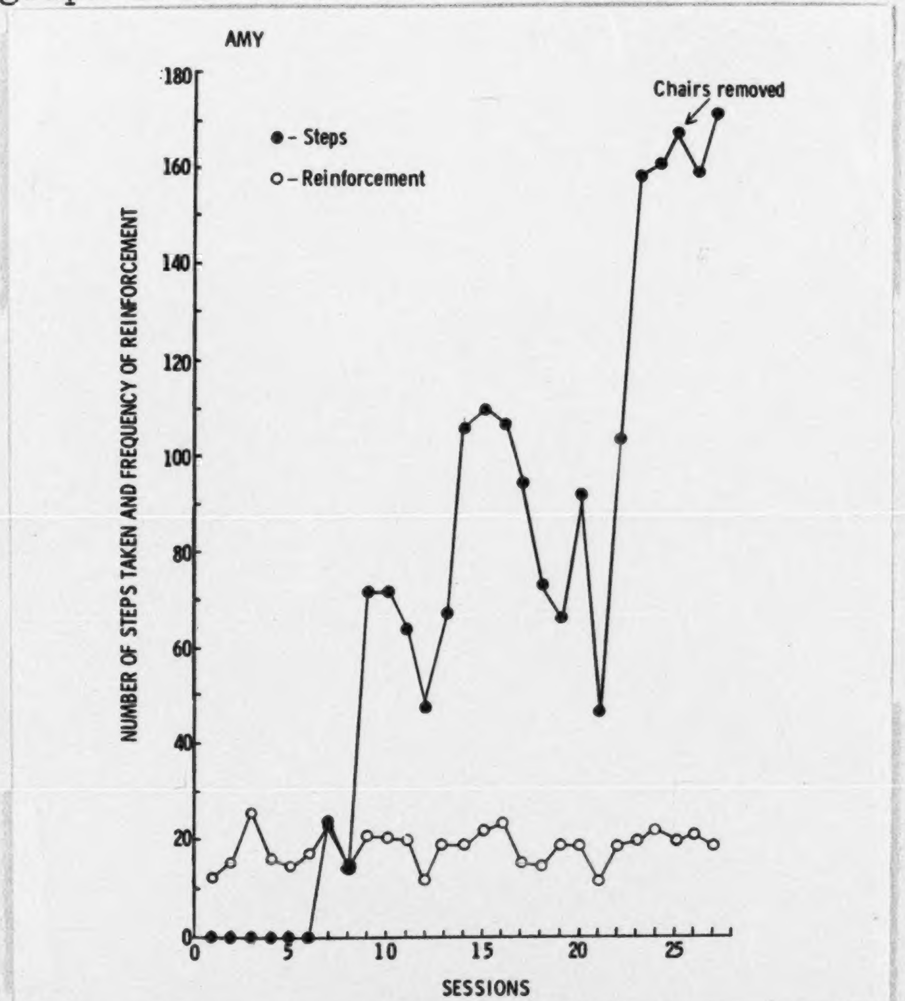

Fig. 3. The number of steps taken and the frequency of reinforcement during each session. The arrow indicates when the chairs were removed.

experimental sessions. During the last three sessions one experimenter would hold Amy's hand and the other would stand facing Amy holding out the edible, repeating the command, "Amy, come here!" Amy was reinforced on a variable ratio schedule of one edible per eight steps. After three sessions the walking behavior had generalized to become the typical daily mobility pattern and the study was discontinued.

The CTIT also recorded the number of reinforcers given Amy during the shaping sessions. The number of reinforcers remained relatively stable throughout the study.

By the end of the first year of study each student is required to perform consultation skills independently with at least one classroom teacher. Each student is expected to develop and implement a learning procedure through consultation with a classroom teacher without direct assistance from faculty.

The study[3] below, completed at the end of last year, will serve as an example of an independent project conducted by a student before entering the internship.

Two nine year old boys in an ungraded classroom were referred to the CTIT because of below grade level performance in arithmetic. Each afternoon the whole class was given a worksheet containing 30 review math problems. The worksheets were part of a series

[3] This study was conducted by Carolyn Hall, a regular classroom teacher through consultation with Miriam Conlon, a CTIT completing her first year of training. Edward Hanley provided technical assistance and advice throughout the study. This study has been accepted for presentation at the 3rd Annual Kansas Symposium for Behavioral Analysis in Education, Lawrence, Kansas, 1972.

arranged as a review exercise but were of increasing difficulty as new math facts were being continually added. The teacher allowed the class 20 minutes to complete the worksheet.

On the basis of a pretest, one boy, Tom, was selected to act as a peer corrector for the other two boys, Dick and Harry.

During the Baseline measurement period a permanent seating arrangement was established which included seating the three boys at the same table. Review worksheets were distributed by the teacher as usual during this period and everyone was expected to do his own work.

During the first experimental condition (Peer Correction I) the teacher gave Tom, the peer corrector, a stopwatch and an answer sheet. The peer correction procedure was then explained to all three boys. Tom was to start the watch at the beginning of the 20 minute period. After six minutes had elapsed Tom was to stop the watch and, using the answer sheet, correct the examples completed by Dick and Harry. This involved marking a "C" with a red pencil on correct examples and ignoring incorrect or incomplete work. Tom then returned to his seat and resumed his own work. The watch was again set in motion until another six minutes had elapsed when the procedure was repeated. If time remained, Tom would correct for the last time at the end of the 20 minute period if time permitted.

To test the strength of the experimental condition the classroom teacher returned to Baseline Conditions on day 18 for a period of four days. The peer correction procedure was then reinstated for the remainder of the school year.

Figure 4 shows the effects of the peer correction procedure on the performance of all three boys. On several occasions a second observer independently checked the boys worksheets and always recorded 100% agreement with the peer corrector.

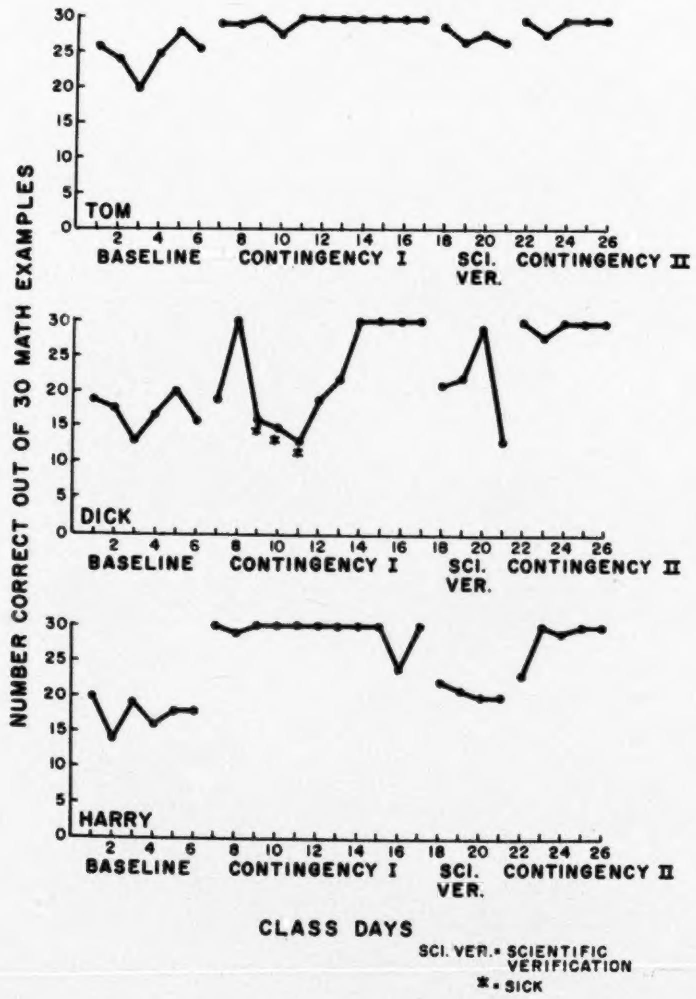

Fig. 4. The number of correct responses during baseline and contingency conditions for the peer corrector (Tom) and the other two boys participating in the study.

As the graphs indicate, response accuracy on the worksheet assignments improved for all three boys during both Peer Correction conditions when compared to the Baseline conditions. The results clearly show that a peer corrector can work successfully with peers with no adverse effect upon his own work. The study also shows that the peer correction procedure was effective in improving the performance of both boys originally referred because of poor work.

Late into the spring semester, students begin preparing for their internship in a Vermont school district. Presently there are many more school districts seeking CT interns than there are CT interns available. Indeed, there is strong competition among school districts for CT services. CTIT's interview interested school districts and make presentations to school boards, administrative personnel, teachers and parents. Their presentations include the internship year objectives emphasizing services to eligible children, a description of services provided by the CT intern, and where appropriate, a statement of the budget and other support required by the CT intern to meet the specified objectives. Other support includes a CT aide, office space and equipment, and released time for professional advancement.

During the early stages of the internship, program faculty provide close support and supervision of CT interns. By the end of the first semester, however, CT interns are pretty much on their own. They can call for help, but few do. CT interns attend weekly seminars at the University throughout the internship year. Interns generally plan their own seminars and often invite faculty to attend. At this point in their training the faculty sometimes feel that the tables have been turned, and roles reversed, as there is much to learn from the students.

During the internship year students must demonstrate their ability to independently develop and implement learning programs for eligibile children. A study performed by two CT interns[4] working together in a rural Vermont school district will serve as an example of the programs developed by students during their internship.

The two CT interns had selected a Vermont school district for their internship which had adopted the "open classroom" model exemplified by certain British primary schools. During the previous summer, partitions had been removed from classrooms to create large open spaces in which children could freely move and engage in a variety of activities. Typically, activities were designed to be carried out by individuals or small groups of children. Teachers were assigned to teams of two or three and were given the responsibility of managing the learning activities of from 48 to 72 children homogeneously grouped by age.

In the open classroom system it seems to be important that children assume responsibility and participate in the various learning activities. Two boys were referred to the CT interns because of their failure to complete assignments in a sixth year open classroom with 69 children and their teacher. George and Jack were both discipline problems in addition to having severe academic deficits. Jack was also a truant and had been referred to Juvenile authorities for theft and arson.

[4] This study was conducted by Mary McNeil and Susan Hasazi, CT interns with assistance from Adler Muller, Principal of Hinesburg Elementary School and Martha Knight, a CT with the University of Vermont. This study is one of several to be reported at the Third Annual Kansas Symposium on Behavioral Analysis in Education, Lawrence, Kansas, 1972.

The procedures developed by the CT interns and implemented by the classroom teacher included the design of an individualized prescription packet for each boy. Each packet contained a daily schedule, assignment from texts and workbooks, and individually planned units in social studies and science. Activities such as recess, physical education, lunch and music were also included in the packet.

When each assignment was completed, the teachers would initial a card included in each packet. If the entire packet was completed, the initialed card was sent home. A completed card also earned a conference with one of the CT interns. Six completed cards earned a trip of their choice with one of the CT interns.

Participation was defined as face orientation to teacher and/or assigned materials. This behavior was observed at three minute time samples during the same 30 minute period each day. In addition, the teacher also kept a record of the number of assignments completed daily.

Figures 5, 6, 7 and 8 show the results of the procedures with

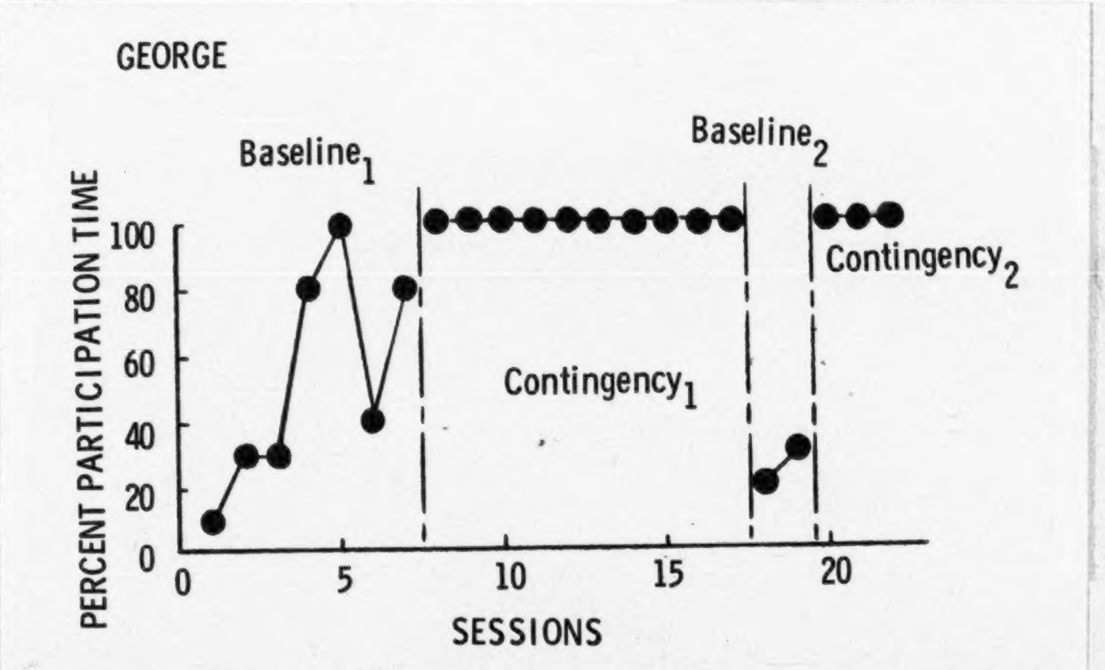

Fig. 5. The percent of time during a 30 minute interval that George participated in assigned activities during baseline and contingency conditions.

both boys. During Baseline conditions when the procedures were not in effect both boys failed to consistently participate during the daily half-hour period. Task completion for both boys was also

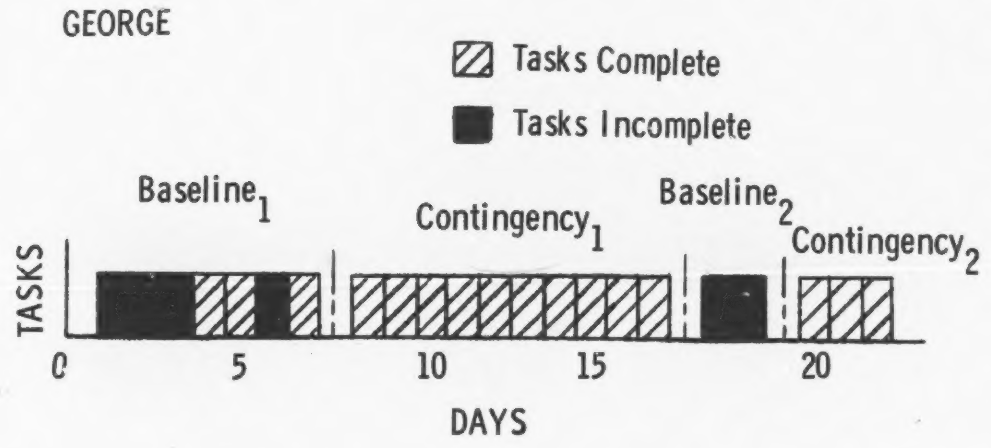

Fig. 6. The number of days that George completed his assigned tasks during baseline and contingency condition.

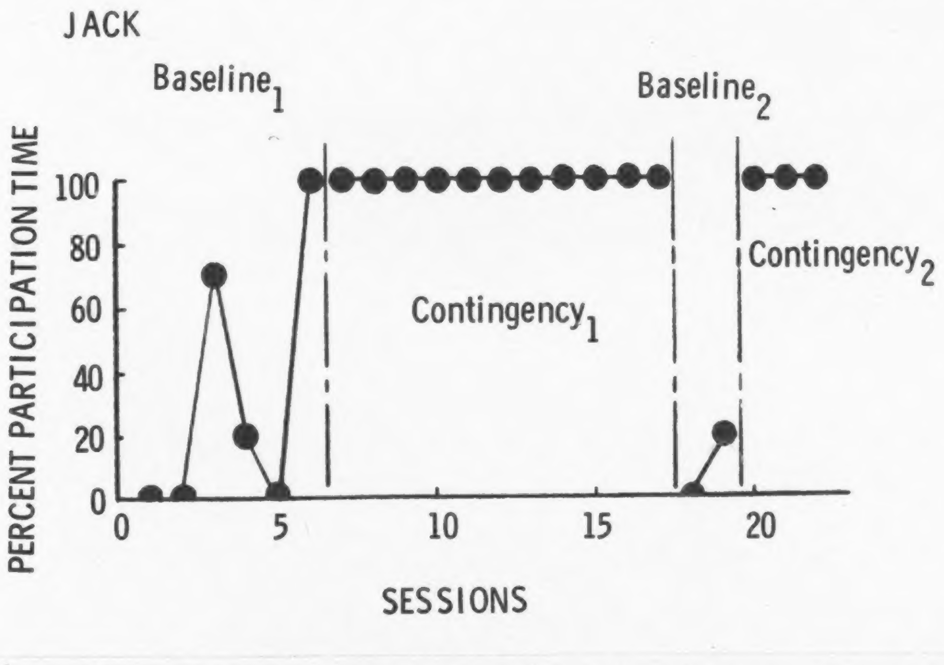

Fig. 7. The percent of time during a 30 minute interval that Jack participated in assigned activities during baseline and contingency conditions.

variable. During Contingency conditions the boys participated

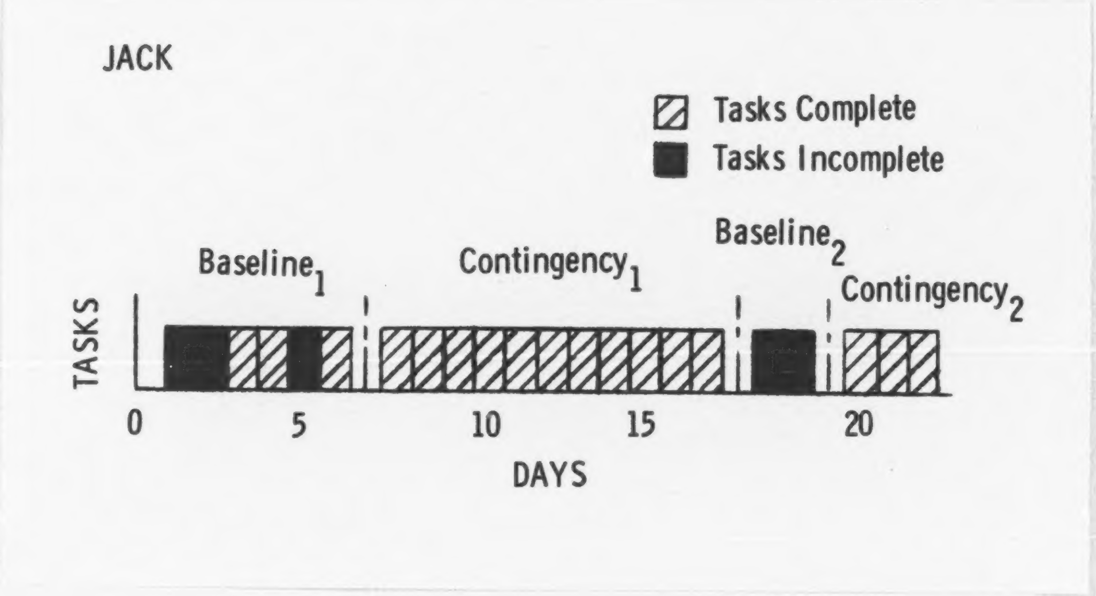

Fig. 8. The number of days that Jack completed his assigned tasks during baseline and contingency conditions.

100 % of the time and consistently completed their tasks. The teachers report that both boys now seem to enjoy their work and have become "model" students.

In addition to providing special education services to eligible children, CT interns engage in many other activities aimed at strengthening the consulting teacher approach to special education. CT interns give workshops for teachers in their districts, consult with parents who may have problems with their children at home and make presentations to their local school boards and other interested groups, such as Rotary Clubs, local PTA groups, etc. The interns play a very important role as participants in presentations of the consulting teacher approach to school districts who do not have CT's. Many school districts have become interested in the program as a result of CT intern presentations.

At the completion of training, students become eligible for State certification as a CT. A CT candidate is recommended for Vermont certification by the Board of Consulting Teacher Examiners which is composed of certified CT's elected by their peers. Certification is based upon specified competencies which each candidate must demonstrate. The two-year training program is designed to provide the opportunities for each candidate to acquire the specified competencies.

TRAINING EVALUATION

Students are continuously being evaluated throughout their training by program faculty. Students must demonstrate mastery (90% accuracy) in oral examination of the material presented in instructional units. They must also demonstrate to their Studies Committee that they have attained the modular objectives specified above. Students must also demonstrate their effectiveness in consulting with teachers to provide specific education services to eligible children within regular classrooms. The application of behavioral techniques to accelerate the progress of eligible children results in a precise record of the effectiveness of the techniques employed by the students in the program. This record serves as an immediately available evaluation of the procedures employed by the student. The behavioral records represent the most important component of the evaluation process.

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THE MULTIDISCIPLINARY APPROACH TO SPECIAL EDUCATION

"YOUR INVOLVEMENT CAN MAKE A DIFFERENCE"

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All authors are members of The Council For Exceptional Children

Time Required - Three Hours

Target Audience - Teachers, Psychologists, Social Workers (general)

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INTRODUCTION

Recently, Washington County School Board, Abingdon, Virginia, has taken a giant step toward a multidisciplinary, coordinated, child-centered, educational interprise, implimenting highly individualized instruction for children who are in need. The professional personnel involved in this joint venture are the educational director, social worker, school psychologist, school nurses and classroom teacher. The major emphases of the program is placed on the referral procedures, sociological services, psychological services and educational intervention. This is an effort to bring in a highly coordinated manner every possible professional service which may benefit the exceptional child. The whole child concept, joint professional intervention, and individualized instruction are the philosophies behind this model.

The presentation involves an introduction and demonstrations of the new multidisciplinary special education model recently adapted by Washington County Public School Sustem. This will be accomplished by means of participants presentation and group participation, involving the audience in decision making and evaluative processes.

The Purpose

The purpose of the workshop is three-fold. The first is to provide the teachers, administrators, and resource staff with the opportunity of "walking in their brothers moccasins" to enhance their understanding of the responsibilities and the nature of other educators'function in the multidisciplinary approach. The second is to increase competencies in setting up workable behavioral objectives for the children who need individually tailored curriculum. The third is to orientate the participant toward the team approach to individualized instruction.

The Content of the Paper

In an attempt to describe the manner in which this multidisciplinary approach renders its services to needy children, this paper will be divided into five sections. The first section will present the statement of the problem in the multidisciplinary approach. The second section will concern itself with the way in which the classroom teacher, education director, social worker, school psychologist, and school nurses function in the referral procedure, sociological services, psychological services and educational intervention to provide individualized instruction for exceptional children. The third section will involve the presentation of three case studies of children with varying problems, namely, mental retardation with organic origin, mental retardation induced by severe environmental deprivation and emotional disturbance due to traumatic experiences in life. The fourth section will involve the audience in a high envolvement technique which will allow everyone to take an active part in the recommendation-making procedures. The audience will be divided into at least three small groups which will work toward setting up concrete behavioral objectives and specific instructions for each of the involved children. At the end of the workshop the participants will interact.

The Problem

In recent years, due to the growing awareness of childrens' needs, local school boards have been hiring an increasing number of specialists on their staffs. The education director, school psychologist, school social worker, and school nurses are some of these specialists. Although the special services rendered by the non-instructional staff has unlimited potential for bringing a truly exciting new ball game to the educational system, many games played have not been so exciting.

The typical scene has been like this. A teacher refers a child for a problem, or a number of problems, to a team of specialists. Several days later, a social worker or a visiting teacher comes around, sees the child, and visits the parents. And in a few days, the teacher receives a written sociological report, stating, "This seems to be the problem. Try this. This might work." Several weeks later, another specialist, called school psychologist, comes around, tests the child, and goes off. Again, the teacher ends up with another written report, saying, "This appears to be the problem, try this. You will like it." Well, the teacher doesn't like it. The more specialists, the higher the stack of reports, asking her to do this and do that.

Nobody likes to work at somebody else's bidding. The teacher wants to be involved in the total process of educational planning and implementation. She wants to do the job of a professional, not a hired technician.

With the arrival of "open classroom", "swinging door", "individualized instruction", the teachers and the specialists are equally under the pressure of coming up with something which is workable and relevant to each child in school. Here arises the need for working togetherness, sharing professional competencies and concerns of each professional, on behalf of the child.

MULTIDISCIPLINARY APPROACH TO SPECIAL EDUCATION

The following guidelines describe the responsibilities of each member of the multidisciplinary team and how each member of the team functions cooperatively in each stage of team work.

Referral

The classroom teacher, upon recognition that a student is having some difficulties in his/her learning and/or behavior, obtains a Teacher Referral form from the principal, completes this form and sends it back to the principal. The school principal then signs this referral and provides any additional information that is considered to be of importance in the evaluation.

Upon receipt of the referral, the Coordinator of Special Education shall call for a Special Education Committee, consisting of, but not limited to, the school psychologist, the school social worker, the visiting teacher, and the school nurses to discuss the nature of the service to be rendered in response to the referral and to determine the professional individuals to assume the major role in carrying out the service. Each referral shall be scheduled for a case study upon meeting the various level of priority listings.

Priorities

All referrals will be scheduled for case studies on the basis of individual needs as listed in the priorities below.

Code: P^1 - P^6 (P^1 indicating top or first priority and P^6 indicating least priority)

P^1 A child who presents unusually severe and persistent discipline problems, the nature of the problems is such that it endangers the health and compromises the learning opportunities of other students.

P^2 A child whose classroom behavior is disruptive to others and who does not progress educationally and psychologically in accordance with his achievement expectancy as evidenced by:

a) discrepancy of two years or more between the level of academic achievement and his grade level expectancy as measured by any standard achievement or aptitude test(s)

and/or

b) mental age equivalence score of one half to three fourths of his chronological age as measured by any standard achievement, aptitude, readiness, or intelligence test(s)

and/or

c) standard score of 1.5 SD or more below the mean of any achievement, aptitude, or intelligence test(s)

and/or

d) standardized test score below 10 percentiles on any achievement, aptitude or intelligence test(s)

and/or

e) Stanine score of 8 or 9 on any standardized achievement, aptitude, or intelligence test(s)

P^3 A child who meets the criteria for P^2, except that he is not a disruptive influence on other students.

P^4 A child who needs a psychological re-evaluation regarding his placement in the special education program. A child who is in the special education program is to be given a yearly re-evaluation and a complete psychological re-evaluation at least once in three years.

P^5 Any child who meets the criterion of "exceptionality" as listed in the Special Education Code, but who has not been included in the previous four priorities. The ideology of these conditions are primarily psychologically induced. Code: 7845, 7850, 7855, 7860, 7865, 7870 and 7875.

P^6 A child who has been referred for a psychological evaluation who does not fit neatly into any of the above stated priority listings.

Diagnosis

Seldom is the problem for which a student is referred to professional individuals in the School Board Office simple enough to be called "The Problem". Usually the problem is not a single problem, but many problems of various nature with varying intensity. Recognizing the multidementionality of the problem should be the very first step toward the appropriate management of the problem. Diagnosis should involve an evaluation of a problem in all of its relevant dementions, so that an outline for action, decisions and programs can be made based on the diagnosis.

Each member of the team will explore the problem in the light of his professional knowledge and skills. Home visits, classroom observations, the teacher, the resource person(s) confrontations shall be made. Psychological and/or medical examination(s) shall be administered when needed.

Once sufficient information and pertinent data regarding the student has been obtained by members of the multidisciplinary team, various views on the problem shall be communicated among the team members in an attempt to cross-validate their findings and information. These findings and information will constitute the basis for the recommendations.

Recommendations:

The child has problems of such and such a nature under these and those conditions. What can be done for him? The search for the feasible action, including educational programming and/or educational placement, shall be made jointly by the team members.

The recommendations shall be written in behavioral terms with specific time allottment and built in evaluative measures. Recommendations written in behavioral terms will clarify and facilitate the goals, methods and procedures involved in the teaching - learning situation.

Feed-Back and Follow-Up

The resource people, as individuals or as a team, shall make themselves available to the classroom teacher in assisting her in carrying out recommendations when and if the teacher expresses her wish for such additional assistance. The Multidisciplinary Team will have a staffing at the end of the specified time period for formal evaluation of the team endeavor.

WORKSHOP

Procedures

Upon entering the workshop, each individual is assigned to a small group consisting of eight persons. Each group is assigned a child's name, either Johnny, Mary, or Sally.

The workshop opens with a slide presentation of exceptional children to the music of Desiderata. The title of this slide presentation is, "Can You Become Involved?" This sets the theme for the presentation — "YOUR INVOLVEMENT MAKES THE DIFFERENCE."

The three session leaders make short introductory remarks. This includes the rationale behind the presentation and the manner through which the workshop will proceed.

Each participant receives a time-loaded task sheet which will monitor the group for the first thirty-five minutes of the workshop. The following is the exact copy of Task Sheet No. I:

TASK SHEET NO.1

Task One:	Read this sheet quickly!
Time 2 min.	Please complete each task in the task time allotted for the group.
Task Two:	Gain eye contact with each of your group members.
Time 10 min.	Turn to the person seated next to you.
	Introduce yourself to this person. Tell this person as much as you can in the time allotted.

Task Three: Introduce the person you have been talking with to the group.

Time 15 min. Tell the group your first impression/impressions of your partner.

Task Four: Nominate or volunteer for these roles:

Time 5 min.

- Child
- Teacher
- Principal
- Education Director (Group Leader)
- Nurse
- Social Worker
- Psychologist
- Group Secretary

Those who do not have a role may choose to work in any of the above roles.

Task Five: Role packets will be distributed to each group.

Time 3 min. Open the packet and follow the enclosed Packet Task Sheet

Upon completion of Task Sheet No. 1, the facilitations will distribute Role Packets to the groups. By this time, each group member will have assumed a role — Child, Teacher, Principal, Education Director, Nurse, Social Worker, Psychologist and Group Secretary. These roles will be maintained throughout the remainder of the workshop.

In the Role Packet is a Packet Task Sheet, role information, and a workshop evaluation. In the Group Secretary's packet is a transparency, pen and eraser in addition to the above. The Packet Task Sheet monitors the next hour and one-half of the workshop. The Packet Task Sheet is as follows:

PACKET TASK SHEET

Task One: Read silently your role information.

Time 2 min.

Task Two: Read your information about this case to the group in the

Time 20 min. following order:

Child
Teacher
Principal
Nurse
Social Worker
Psychologist
Education Director (Group Leader)
Group Secretary

Task Three: Time 10 min.	Based on the information provided about the child, identify priority problem/problems and state in behavioral terms.
Task Four: Time 15 min.	Identify desired behavior in the child at the end of a one-month program.
Task Five: Time 10 min.	Suggest material and procedures to bring about each desired behavior change.
Task Six: Time 2 min.	Education Director from each group will bring the group's transparency to the session leaders.
Task Seven: Time 30 min.	Session leaders will briefly review each case. Education Director for each group will briefly give the group's recommendation on this case. Surprise !!

Since three cases are being conducted simultaneously, the session leaders will briefly describe each child for the entire audience. Following these descriptions, each group leader will present their decisions and recommendations on the child. These group presentations will lead to interaction between groups.

Involvement is the key to this workshop and the participant will be rewarded by being able to see their own involvement. This will be accomplished by video taping the group interactions during the entire session, which will be presented at the end of the workshop.

Tools

Two time loaded, written task sheets; role packets; transparencies; slide and tape recorder; and video-tape equipment are used in the workshop. These tools are used in such a way that all the multidisciplinary efforts can be directed toward immediate action for the child under consideration.

Target Participant

Classroom teachers, administrators and professional individuals will find this workshop enlightening and effective in bringing professional efforts in coordinated and meaningful manner for the benefit of the child.

With minor modification, this technique can be used effectively in any educational solar system where the child is the center of the matter surrounded by the planets of concerned educators.

APPENDIX

Summary: (Mary)

Mary is a twelve-year-old, Junior High, Educable Mentally Retarded student who has been in special classes for the past three years. She has been referred to the Multidisciplinary Team by her teacher and her mother for reevaluation with primary concern being whether Mary should remain in special education.

Upon social casework evaluation, it was found that Mary's early developmental history seemed to fall within the normal range except in the area of speech. Here she demonstrated some articulation difficulties which were for the most part corrected after two years of speech therapy.

Mary is one of three children. She has a sixteen year old brother and a twelve year old fraternal twin brother. There seems to be some sibling conflict between Mary and her two brothers because of Mary's inability to perform on the same level as her brothers. This seems to be manifested in frustration for Mary.

Mary's parents, especially her mother, do not seem to have accepted Mary's handicap. This is demonstrated by her insistance on blaming the teachers for Mary's failures in regular classes and her desire to have Mary placed back in regular classes full time.

Medically, Mary appeared to be all right at birth. At five days of age she suffered a collapsed lung which required placing her in an oxygen tent. At age two, Mary had her first seizure. Since this time she has been on seizure control medication. When Mary was eight years old she had meningitis and was hospitalized for six days.

Upon psychological examination, Mary scored a Verbal Scale I.Q. of 70, a Performance I.Q. of 76, and a Full Scale I.Q. of 70 on the Wechsler Intelligence Scale for Children. On the Wide Range Achievement Test, Mary's reading score was 2.6; her spelling score was 2.6; and she had an arithmetic score of 3.9.

Group testing indicates Kuhlmann-Anderson Test total I.Q. of 90. Large-Thorndike Intelligence Test; Verbal I.Q. 54, Non-Verbal I.Q. 69, and a total I.Q. of 62.

Mary's relative strengths lie in the area of good attention span and adequate visual-motor coordination. Her areas of weaknesses lie in the area of language facilities: Mary does not have a good receptive vocabulary, is limited in abstract thinking, and is deficient in verbal expression.

Socially, Mary appears to be dependent, immature, and lacking in social competencies. She seems especially inadequate when it comes to establishing and maintaining peer relationship.

Child: (Mary)

I hate Special Ed.! I don't belong there! My Mother and my last year's Special Ed. teacher know that I don't belong there. I am not like the other Special Ed. kids. I don't talk like them and I don't dress like them. I don't understand why I have to be in class with kids I don't like. I want to go back to the regular classroom.

I am in a regular Health and Math class. I am more like these kids. Their clothes are really mod, not hand-me-downs. I like these two classes best of all. At the first of this year I had some trouble in my regular Health classwork. I did not like my teacher. She always gave me extra work. My Mother told the principal that this teacher was not fair to me. He made her change and now everything is all right.

My Mother wants to have me back in the regular class. She is going to have a meeting with people in the school board office next week to get me out of Special Ed.!

Teacher: (Mary)

Mary seems to feel that she is far superior to the other students in my Special Education class. It is true that her family's socio-economic status is superior to that of most of my other students. Mary lets the other students know this. In comparison to the other students her academic work is only average.

This year she has been in two remedial classes designed for underachievers in the regular program. She had a great deal of difficulty at first in her Health class. She felt the teacher was unfair to her because she was not getting "A's". However, after talking with this teacher, I feel the work was too difficult for Mary. She could not keep up with the class. In her Math class she seemed to be able to keep up until just recently when they started work on fractions. She doesn't seem to be able to comprehend the concept.

I feel that Mary's major difficulty is that she feels she is able to do more than she actually can. This belief seems to have come from her teachers in the past and her parents. Naturally, if you have been told that you are superior to other students in your class as long as she has, you will eventually start believing it. Mary is a "loner" in my class, she neither approaches or is approached by other students.

Principal: (Mary)

You would think that parents who are as educated as Mary's parents would understand that we are attempting to meet Mary's needs in our Special Education program. They seem to be rejecting the Special Education program. We are only trying to help Mary, but they seem to feel that we are depriving her of the quality of education that the brother is getting. They are feeding this child with false hope that she will be able to achieve just like her twin brother can.

The parents have made it very difficult for the school personnel to work with Mary. Every time something happens, such as the problem in Health class, Mary's mother is here demanding that I correct the situation. I regret that we allowed her to participate in this regular remedial class. Our intention was to integrate her as much as possible in our regular program; however, it seems that we over-estimated her ability. She is not only incapable of keeping up with her academic work, but also is incapable of adjusting to the social climate of the class.

Education Director: (Mary)

This does not pertain to the child; however, it will clarify my function in the group. I will be acting as Chairman of the group and Mediator if the group gets into a stalemate during their tasks. I will be responsible for seeing that the tasks are completed as instructed during the time limits. At the end of our Multidiscipline Conference on this child, I will present to the entire assembly the problem which we feel to be of priority status, objectives, and measures to solve this problem.

The following is a cumulative record of Mary's educational history:

Testing:

Kuhlmann-Anderson Form B - 2nd Grade: C.A. 7.7; Total MA. 6.1; Total I.Q. 90

Lorge-Thorndike Intelligence Test - 4th Grade:

Verbal I.Q.	54	Non Verbal I.Q.	69	Total I.Q.	62
Age Equiv.	5.03	Age Equiv.	6.01		
Grade Equiv.	1.1	Grade Equiv.	.09		

SRA Achievement Series - 4th Grade:

Social Studies		Arithmetic		Language Arts	
Grade Equiv.	3.1	Grade Equiv.Concepts	3.2	Grade Equiv.Cap.&Punct.	3.5
		Grade Equiv.Compution	3.1	Grade Equiv.Gram.Usage	3.6
		Grade Equiv.Total	3.1		
Science		Reading		Work-Study Skills	
Grade Equiv.	3-4	Grade Equiv.Comprehension	3.1	Grade Equiv.Reference	3.1
		Grade Equiv.Vocabulary	3.6	Grade Equiv.Charts	3.1
		Grade Equiv.Total	3.2	Grade Equiv.Total	3.1

Personality Profile as Rated by the Teacher

Mary has consistently been rated as either superior or good in appearance. She has been rated good to average in courtesy, cooperation, reliability and study habits. She has been rated average and improving in self-control.

Nurse: (Mary)

Mary appeared all right at birth, but at five days old, mucus collected in her lungs twice. Her doctor felt a lung had collapsed. She was then put in an oxygen tent. At age 2, Mary had her first seizure. She is presently taking 50 mg. Dilanten twice a day, one Eskabarb a day, and threel/2 grain Phenabarbital a day for seizure control. At age 8, Mary had meningitis and was hospitalized for six days.

Mary had mumps at 5 years, chicken pox at 6 years, and measles about 19 months. She had been immunized for diphtheria, smallpox, whooping caugh and polio.

Mary's height and weight are normal for her age. She has had a speech defect but this seems to be corrected. She wears glasses and with them her visual acuity is 20/20.

Social Worker: (Mary)

Family

Mary's family life socio-economic status would be classified as middle class. Her mother is employed in the educational system and her father is self-employed (owns his own farm). The mother has two years of college and the father has a high school education with technical training beyond high school level.

There are three siblings in this family. One older brother who is a senior in high school and one fraternal twin brother who is in elementary school. There seems to be some sibling rivalry between Mary and her brothers. The mother indicated conflicts have occurred between them in athletic activities and in music. Mary seems to become very irritated when she can't take part in the same activities as her brothers.

The mother seems to be the dominent force in this family. She shows signs of over-protectiveness where this child is concerned.

Social Development

Mary seems to be immature in her dealings with peers. She seems to become irritated and frustrated with them when she cannot make peer control. However, these frustrations and irritations seem to be externally directed as opposed to being internally directed. Social Distance Scale indicates that Mary is moderately rejected by her regular remedial class peers.

Psychologist: (Mary)

Mary was referred to the school psychologist by her mother for a psychological re-evaluation regarding her placement in an EMR classroom.

When seen by the school psychologist, Mary was friendly but appeared anxious and apprehensive about the testing. She was slow in responding to the questions asked and her answers were short without elaborations.

The following quantitative data was obtained:

WISC:	Verbal I.Q.	70	WRAT:	Reading	2.6
	Performance I.Q.	76		Spelling	2.6
	Full Scale I.Q.	70		Arithmetic	3.9

BENDER GESTALT: Visual-Motor coordination seems to be well in the normal range of sophistication.

Mary's relative strengths lie in the area of good attention span and adequate visual-motor coordination.

Mary's weaknesses lie in the area of language facilities. Mary does not have a good receptive vocabulary; is limited in abstract thinking; deficient in verbal expression.

Mary appears to be dependent, immature, and lacking in social competencies.

Secretary:

My function in this group is to record the committee decisions. I will record these decisions in two forms. First, I will take notes as the decisions are being made; and secondly, I will transfer our final conclusion to the transparency under the appropriate heading.

I will need the group's help in completing my tasks. Please, Mr. Education Director, allow me the last two minutes of each task to transfer the group's conclusion on this task to the transparency.

Summary: (Johnny)

Johnny is a fourteen year old, sixth grader. He has been referred to the Multidisciplinary Team by his sixth grade teacher and his principal for evaluation due to his continual disruptive classroom behavior.

Upon social casework evaluation, it was found that Johnny has been placed in a foster home for the past eight years. He was removed from the natural home becuase of neglect by the natural mother after the death of his father. The foster father seems very supportive of this child, perhaps to the point of over-protectiveness. At present there is a conflict between the foster parents due to the foster mother's apparent neglect and verbal abuse of this child.

Upon psychological examination, Johnny scored a Verbal Scale I.Q. of 66, a Performance Scale I.Q. of 42, and a Full Scale I.Q. of 50 on the Wechsler Intelligence Scale for Children. On the Wide Range Achievement Test, Johnny's reading score was 1.7; his spelling score was 1.6; and her arithmetic score was 1.9.

Group testing indicates Kuhlmann-Anderson Test total I.Q. of 69. Large-Thorndike Intelligence test; Verbal I.Q. 62, Non-Verbal I.Q. 56, and a total I.Q. of 59.

Johnny's relative strengths appear to be in the area if receptive vocabulary and arithmetic basic skills.

Johnny is limited in working with his hands. A visual perception problem was pronounced.

Johnny has had school adjustment problems ever since he entered school.

Child: (Johnny)

My name is Johnny Smith and I am in the 6th Grade.

It was an accident, I really did not plan to push Billy down. Seems like everything I do is wrong!

Let me tell you what really happened yesterday. I was just coming into the classroom (I guess I was running a little) and there was Billy! Before I could stop, I had knocked him against the door facing. I really did not think that he was hurt, but they had to take him to the hospital anyhow.

My teacher and principal tell everyone who comes to school that I am the meanest boy they have ever seen. I wonder if I am really as mean as they say or am I just one of those unlucky kids who always get into trouble. Once in a while I get into fights and cause trouble. Do you expect me to set here all day and do nothing? Maybe you would rather have me do the first grade work that my teacher gives me. I am sick of that! I will just quit school!!

Teacher: (Johnny)

I don't know what is wrong with Johnny. I can tell you this much, he does not belong to my class. He cannot do sixth grade work and he will not try to do the easier work. He needs something to do with his hands, for example, some vocational training.

I was just sure that he would really hurt someone in the class before the year was over and now it has happened. He sent one of my boys to the hospital. I know that teachers are not supposed to say that any student is going to grow up to be a killer. Sometimes, I wonder if he really intends to hurt the other kids that badly or is he just a wreckless uncontrolled child. When he starts out he usually is just playing around, but by the time the encounter is over someone is hurt. Honestly, if something is not done for Johnny now, I will not be responsible for what will happen next. Johnny always wants to play the clown in my classroom. He is constantly seeking attention and since he cannot get it in constructive lines, he will get it in destructive lines.

Principal: (Johnny)

This child is not supposed to be our problem. He was thrown out of the school that he was supposed to go to because of problems on the bus and because of striking the teacher. I have overlooked a lot of Johnny's misbehavior on the bus, but I cannot close my eyes when he knocks down another child at school. Things like this happen all the time when Johnny is around.

It is really difficult to get any home cooperation concerning Johnny. He is in foster care and his foster father refuses to recognize that Johnny is causing trouble at school. He lives on a farm and maybe they don't see him when he is in a position to hurt other children. Honestly, I think Johnny's foster father is too defensive of Johnny. After our last interview he teld me not to call him with my problems anymore (as if they were not his problems too). Since that time I have had Johnny's case worker out once a week about something. The school should not be expected to handle a child like this.

Education Director: (Johnny)

This does not pertain to the child: however, it will clarify my function in the group. I will be acting as Chairman of the group and mediator if the group gets into a stalemate during their tasks. I will be responsible for seeing that the tasks are completed as instructed during the time limits. At the end of our Multidiscipline Conference on this child, I will present to the entire assembly the problem which we feel to be of priority status, objectives, and measures to solve this problem.

The following ia s cumulative record of Johnny's educational history:

Testing:

Huhlmann-Anderson Form B - 2nd Grade: C.A. 8.11; M.A. 6.2; Total I.Q. 69

Lorge-Thorndike Intelligenct Test - 4th Grade	C.A.	11.2
	Verbal I.Q.	56
	Non-Verbal I.Q.	62

California Reading Test:	Reading Vocabulary Grade Equiv.	2.3
	Reading Comprehensive Grade Equiv.	3.5
	Total Reading Grade Equiv.	3.2

Personality Profile as Rated by the Teacher

Johnny has been rated by his teacher as in need of improvement in the areas of: appearance, courtesy, cooperation, reliability, study habits, and self-control. This is the lowest possible rating given to students.

Nurse: (Johnny)

Johnny's early development history does not indicate any unusual factor. He has had none but the typical childhood diseases, ie., measles, mumps and chicken pox, and he did not run an extensive temperature with any of these diseases.

Prior to his placement in a foster home it was determined that Johnny was anemic and he was placed on iron and other medication to correct this condition. He was also treated for a serious sinus infection during the first six weeks in the foster home.

Johnny seems to be somewhat hyperactive. He is constantly moving about the classroom and from reports at home, this behavior is present there also. Emotionally, there does seem to be some indications of deviant behavior such as attacks on other students.

Social Worker: (Johnny)

Johnny is a fourteen year old male, who has for the past eight years been placed in a foster home. Johnny and the five other siblings were removed from their natural home by the Court because of the natural mother's inability to manage home affairs which resulted in very serious neglect of the children. Johnny's natural father was deceased at this time.

In the foster home, Johnny was warmly accepted by his foster father. There is some indication that the foster father gave Johnny extensive attention because of his early adjustment problems which seemed to be related to the fact that he was a "Mamma's Boy" and missed his mother terribly.

In the past two years there has been some conflict between Johnny and his foster mother. The foster mother feels that Johnny will not do anything that he is wanted to do. She also feels that this is directed to the fact that her husband has spoiled Johnny. There are some indications that this child is being neglected and verbally abused by his foster mother. However, the foster father seems to feel very attached to Johnny and tries to compensate for conflicts between his wife and Johnny.

Psychologist: (Johnny)

Johnny was referred to the school psychologist for his disruptive and aggressive behavior displayed at school, and his poor academic achievement in most of the school related subjects.

When seen by the school psychologist, Johnny was mannerly and cooperative. His personal hygiene was very poor.

The following quantitative data was obtained:

WISC:	Verbal I.Q.	66	WRAT:	Reading	1.7
	Performance I.Q.	42		Spelling	1.6
	Full Scale I.Q.	50		Arithmetic	1.9

BENDER-GESTALT: The level of development in Visual-Motor coordination is approximately six-year-old level.

Johnny's relative strengths lie in the area of receptive vocabulary.

Johnny's weaknesses lie in the area of verbal expression, abstract concepts, and working with manipulative materials. Johnny is limited in comprehending part-whole, spatial relationships involved. A visual perception problem is pronounced.

Johnny has a negative self-concept. He wants to be placed somewhere he can experience success.

Secretary:

My function in this group is to record the committee decisions. I will record these decisions in two forms. First, I will take notes as the decisions are being made; and secondly, I will transfer our final conclusion to the transparency under the appropriate heading.

I will need the group's help in completing my tasks. Please, Mr. Education Director, allow me the last two minutes of each task to transfer the group's conclusion on this task to the transparency.

Summary: (Sally)

Sally is a fourteen-year-old, sixth grader, who repeated two of the primary grades and is repeating the sixth grade work this year. Sally has been referred to the Multidisciplinary Team for her disruptive behavior displayed at school and on the school bus, in the form of abusive and obscene language, fighting with peers, defiant and uncooperative attitudes toward school authority figures and uncontrolled temper outbursts.

A sociological evaluation reveals the fact that the members of Sally's family have been involved in numerous incidencies with legal authorities, including actual imprisonment for breaking into the neighbors. The authoritarian, rigid, overtly aggressive father now has terminal cancer. The shy, retiring wife has been forced into the situation where she has to make major decisions in most of the family matters. It appears that the father has been excessively indulgent toward the children in recent years. The husband and wife blame each other for their failure in disciplining the children.

Upon psychological evaluation, Sally was mannerly and cooperative. She carried out her conversation in a matter-of-fact fashion. No anxiety or guilty feelings were revealed. Sally scored a Verbal I.Q. of 74, a Performance I.Q. of 68, and a Full Scale I.Q. of 68 on the Wechsler Intelligence Scale for Children.

Sally's relative strengths are her adequate attention span and arithmetic basic skills. Sally's weaknesses lie in the area of inadequate repertoire of vocabulary, deficient abstract concept formation, poor social judgment and poor visual perception. Sally is slow in sizing up social situations, and tends to jump into conclusions. Due to Sally's deficient visual perception, it seems advisable to utilize her auditory channel as much as possible in teaching-learning situations. Sally's academic achievement is approximately fifth grade level.

Emotionally, Sally appears to have a negative self-concept, viewing herself as a "mean child who tends to act up". Sally knows that she can get her way at school by being consistantly defiant and uncooperative.

Child: (Sally)

I am Sally Jones. I am fourteen years old and in the 6th grade.

People are funny, they make a big deal out of nothing! Why should two toy guns cause this much of a fuss? With all this trouble, you would think they are real. I like guns./ My father was gunsmith. All I wanted to do was to live up to my word. I told them that if they didn't stop bothering me, I would bring the guns to school and shoot them off.

Actually, the guns are not the only things that get me into trouble around here. Just let me do the least little thing and everyone jumps on me. The teacher gets mad at me and says that I use obscene language. Whatever that is.

There are certain things that I do not like to do at school and will not do. When I make up my mind not to do something nobody can make me do it. I will not wash my hands at school or jump up and down in physical education. Sometimes I will not do the school work that my teacher gives me. It's really funny how mad she gets.

Teacher: (Sally)

Sally has been creating disruptive incidencies at school and on the school bus by imitating various mischiefs, such as shooting toy smoke-guns at her classmates, using obscene language directed at boys, and starting fights, etc. Sally's attitude toward me has been defiant and uncooperative. Sally refuses to participate in various school-related activities, such as physical education activities, classroom assignments and conforming to the school bus regulations, etc. Sally is always talking to herself under her breath. I wish I knew what she is saying. As far as classroom work is concerned, Sally can do it if she would only try, but most of the time she will not try. Sally has repeated the first grade and the fourth grade. I don't think it would help her to repeat another year. I have tried everything to help Sally but nothing has worked. I need help!

Principal: (Sally)

Sally has been causing trouble at this school since the first day she came here. In the past few months the situation has become much worse. I really don't know if we can keep her here any longer. Especially, if she is going to endanger the lives of our other students. Maybe she could not kill anyone with those toy guns but she could have put out someone's eye with the pellet gun.

I had her father and mother here last year about some obscene letters that Sally had written. The father was very hostile and put all the blame for Sally's problems on the school. He refused to admit that he had noted any behavior problems at home.

Sally has missed only nineteen days in the eight years that she has been here in school. Her parents told me that they do their job in getting her to school and they expect the school to do its job when she gets here. With her present behavior, I just don't see how we can.

Something has to be done about this child before I lose a very good teacher.

Education Director: (Sally)

This does not pertain to the child; however, it will clarify my function in the group. I will be acting as Chairman of the group and Mediator if the group gets into a stalemate during their tasks. I will be responsible for seeing that the tasks are completed as instructed during the time limits. At the end of our Multidiscipline Conference on this child, I will present to the entire assembly the problem which we feel to be of priority status, objectives, and measures to solve this problem.

The following is a cumulative record of Sally's educational history:

Testing:

Lorge-Thorndike Intelligence Test - 4th Grade:

C.A.	11.2
Verbal I.Q.	81
Non-Verbal I.Q.	71

SRA Achievement Series - 4th Grade:

Social Studies		Arithmetic		Language Arts	
Grade Equiv.	3.1	Grade Equiv.Concepts	4.5	Grade Equiv.Cap.&Punct.	3.1
		Grade Equiv.Compution	4.6	Grade Equiv.Gram.Usage	3.2
		Grade Equiv.Total	4.5		

Science		Reading		Work-Study Skills	
Grade Equiv.	3.1	Grade Equiv.Comprehension	3.5	Grade Equiv.Reference	3.1
		Grade Equiv.Vocabulary	3.5	Grade Equiv.Charts	3.1
		Grade Equiv.Total	3.5	Grade Equiv.Total	3.1

Personality Profile as Rated by the Teacher

Sally has been rated by her teacher as in need of improvement in the areas of: appearance, courtesy, cooperation, reliability, study habits, and self-control. This is the lowest possible rating given to students.

Nurse: (Sally)

Sally's early development history does not indicate any unusual factor. She has had none but the typical childhood diseases, etc., measles, mumps, and chicken pox; and she did not run an extensive temperature with any of these diesases.

Prior to entering the first grade, it was determined that Sally needed corrective eye surgery at the Muscle Imbalance Clinic. This surgery was performed and corrective glasses were prescribed; however, until the past year Sally had been unwilling to wear her glasses, due to her inability to overcome the initial adjustment problem.

Emotionally, Sally seems to be preoccupied with death. This may be directly related to her father's critical condition with regard to terminal lung cancer.

Social Worker: (Sally)

Sally is the next to the youngest of eight children. The socio-economic level of the family is low at the present time due to the health of the father. He has terminal lung cancer and is not expected to live through the year.

There appears to be a history of maladaptive behavior in Sally's family. Sally's older brothers and sisters have displayed similar types of behavior, as Sally's, both in elementary and high school. Both parents and siblings have been in trouble with legal authorities and one brother has been imprisoned due to his maladaptive behavior.

Sally's father indicated that he believed Sally's behavior is due to the petting and babying that his wife has given her since the death of their youngest child. Sally was four years old when this younger sibling suddenly died.

Family dynamics indicate that a shy, retiring wife who has been dominated by her husband throughout their marriage, is being forced into the position of decision-maker due to the illness of the husband. This appears to be causing an extensive amount of confusion in this home, which may be causing the sibling conflicts (fighting, arguments, etc.) that have occurred with much more frequency and intensity in the past six months.

Psychologist: (Sally)

Sally was referred to the school psychologist for her uncooperative, disruptive, and aggressive behavior displayed at school and on the school bus.

During the psychological evaluation, Sally was relaxed, friendly and well-mannered. She carried out her conversation in a matter-of-fact fashion.

The following quantitative data was obtained:

WISC:	Verbal I.Q.	74	WRAT:	Reading	5.0
	Performance I.Q.	68		Spelling	5.2
	Full Scale I.Q.	68		Arithmetic	5.7

BENDER-GESTALT: The level of development in Visual-Motor coordination is approximate eight-year-old level.

Sally's relative strengths lie in the area of arithmetic basic computation skills, recognition of essentials from non-essential details, and good attention span.

Sally's weaknesses lie in the area of receptive and expressive vocabulary, social judgment, and comprehension of cause-effect, part-whole relationships.

Sally has been getting her way by being stubborn, defiant, and uncooperative with the authority figures.

Secretary:

My function in this group is to record the committee decisions. I will record these decisions in two forms. First, I will take notes as the decisions are being made; and secondly, I will transfer our final conclusion to the transparency under the appropriate heading.

I will need the group's help in completing my tasks. Please, Mr. Education Director, allow me the last two minutes of each task to transfer the group's conclusion on this task to the transparency.

MAY 1 1972

Home Consequation of
In School Behaviors*

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At the present time, there are an estimated 9,000 elementary school children in the state of Vermont who are eligible for special educational services but are not being served through traditional special classes, residential facilities, or resource teachers. These children are in regular classrooms. They are the children who are not meeting the minimum objectives in their classes. They are reading poorly, making slow progress in other academic areas, and often disrupting the normal classroom routine.

Over the past several years, the Consulting Teacher Program has been developed to provide for the needs of these children without removing them from their regular classrooms. Recent writings by Adelman (1971) Deno (1970), and Lilly (1971) argue that a large majority of handicapped children should be served in regular classrooms. McKenzie (1971) cites the following apparent benefits provided by the Consulting Teacher approach:

Regular classroom placement eliminates the need for disrupting existing programs by identifying handicapped children and removing them from their classrooms. It avoids costly busing in rural areas, extensive testing programs, and the resulting labels which are associated with special class placement. Through their work with the Consulting Teacher, classroom teachers receive on the job training in special education skills. Normal children in the classroom provide good peer models and often can be trained to become excellent tutors. They benefit as well as they learn to appreciate and understand children with special needs.

In the procedures which the Consulting Teacher follows, teacher training is of prime importance, but parent consultation also plays a crucial role.

In order to receive Consulting Teacher services for a child, the classroom teacher refers him through her building principal. At their first conference the Consulting Teacher helps the teacher develop an observable and measurable definition of the problem behavior, an instructional objective, and a simple daily measurement of the target behavior that can be carried out by the teacher. The child is not eligible for Consulting Teacher services until a reliably measured deficit in his day to day classroom behavior has been demonstrated. A child's failure to meet the daily classroom objectives in either social or academic behaviors under existing conditions qualifies him for our services.

When the teacher has measured the target behavior for several days, a second conference is held to review the data. If a deficit indeed exists, a second observer provides reliability of the measure, and the parents are called for the first conference.

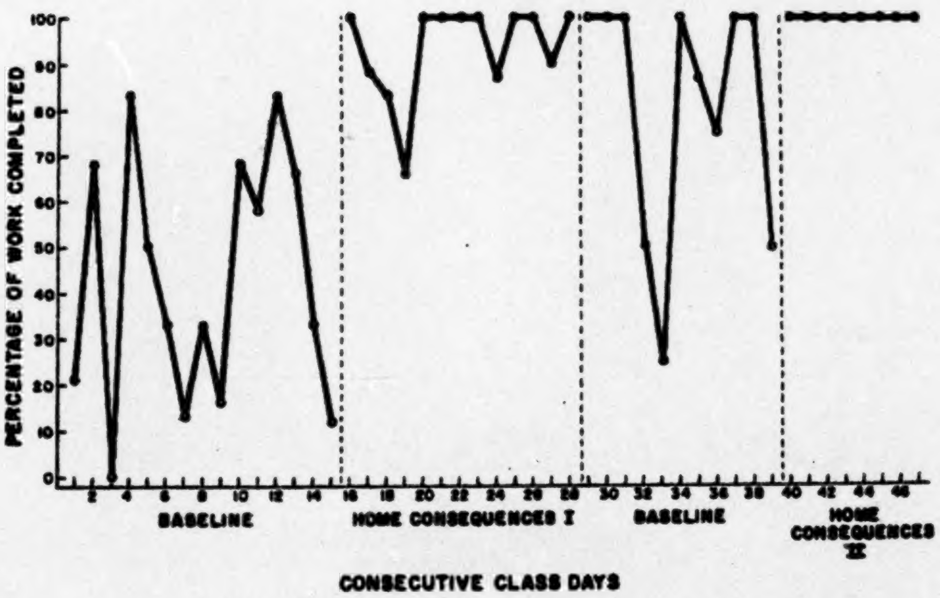
At this parent conference the classroom teacher and the Consulting Teacher present the daily data that has been obtained. It is unnecessary to make judgmental statements about the child or to place blame on either the parents or the teacher for the child's deficit behavior. There simply is a problem which must be solved, and we ask the parent s permission to provide an individualized program through the teacher in the child s classroom. This permission takes the form of a letter of informed consent which must be signed by the parent at this conference. During this first conference we also ask parents to identify rewards available in their home which might be used to reinforce improvement in the target behavior at school.

The Consulting Teacher then visits the classroom, observes the existing conditions, and, with the teacher, devises a new teaching/learning procedure designed to modify the problem behavior and achieve the instructional objective. At this time a second parent conference is held at which the child may be present. Verbal consent to the modification procedure is given by the parent. If a home consequence is to be used, the parent's role is described.

The change in classroom procedure is made, and daily measures continue with periodic reliability checks. When the child has met the instructional objective, another conference is held with the parent. If follow-up is needed, it is arranged for at this time.

Bill's case study will serve to illustrate these procedures. A brief resume of this study has been presented by McKenzie (1971). The study was carried out during my Consulting Teacher Internship. Special thanks are due to Edward Hanley, Carol Burdett, and Martha Knight, whose weekly feedback provided me with invaluable help, and to Beth Dusablon, the classroom teacher.

Bill was referred by his second grade teacher because of his disruptive behavior in class and the resulting lack of academic progress. When Bill attended to his work, he did well; but this was rare. During our first conference, an instructional objective was set. Bill was to complete 100% of all daily written assignments. The teacher was instructed to keep a daily log of the percentage of the work Bill completed. Baseline measures indicated that Bill was not meeting classroom objectives. He was completing an average of 40% of his daily assignments with wide day by day variability.



Bill's mother came in for her first conference, and after seeing the data, agreed that Bill did have a problem. Bill's parents had obtained a divorce the previous year, and he and his younger sister were living with her. Bill's mother said that he had always been a behavior problem at home; and that when he was little, she had often spanked him until he bled. This had not improved his behavior. Her comments during the conference were mostly negative. She felt that little could be done to help Bill. On the other hand, she was fiercely protective, and wanted the best for him, saying that she was sure he was "very smart like his father." She mentioned that she was planning to replace his broken bicycle with a new one in the spring and said she would be willing to make the bicycle contingent on improved behavior in school. She was very skeptical, however, and doubtful of any positive results. She did sign the letter of permission.

The Consulting Teacher s visit to the classroom was an interesting one. During a half hour work time, Bill engaged in the following behaviors: he sat in the sink, swore, squirted water at his classmates, and pounded his feet on the cabinet. (This behavior earned Bill his nickname "the Sink Sitter".) He crawled inside the cabinets threw their contents on the floor, and made loud noises. After a reprimand from his near frantic teacher, he went to his desk, knocked his chair over emptied the desk on the floor, and knocked it over. He made airplanes out of his work papers and sailed them around the room, narrowly missing this observer's head. Out of his seat again, he walked by a group of desks, yelled at the children threw their papers on the floor and knocked one of their desks over. During that half hour period Bill was engaged in appropriate study behavior for a total of 36 seconds. It was easy to understand why the second grade teacher down the hall, a seasoned veteran, said she had nightmares all summer about finding him in her class in Semptember.

The following modification procedure was decided upon and agreed to by Bill and his mother at the next conference. Bill's mother was provided with a large bar graph divided into sections. Each section was worth a number of points and would earn the bicycle part pictured there. The first 50 points, for example, would earn a pedal, the second 50, another pedal; and so on, until 1,000 points, and the complete bicycle, were earned.

Each day Bill could earn a total of 25 points. After each half hour during which he engaged in no disruptive behavior his teacher would record a point on his card. If Bill was disruptive , he was taken to another classroom for a 5 minute time out During that time he could earn no points When Bill completed all of his written reading assignment 10 points were recorded a completed arithmetic assignment was worth 5 points. If he completed a fraction of the assignment he earned a fraction of the points. Other written assignments were not included in the point system since the teacher felt that reading and arithmetic were the two crucial areas and Bill was less likely to complete these than other assignments. She continued to measure all written assignments and a second observer occasionally checked her accuracy. At the end of the day Bill took home his point card and he and his mother recorded the proper number of points on his bicycle graph A marked improvement in Bill s academic performance occurred when this home consequence was put into effect

As judged by the teacher, Bill s social behavior improved as well. Few time outs were used after the first day or two and he earned from 8 to 10 good behavior points every day

Frequent phone calls to Bill s mother praising her for her consistency provided her with additional feedback Despite these phone calls on day 29 Bill s mother left town for two weeks without informing the school Bill went to stay with a neighbor but his bicycle graph stayed at home.

For the first three days Bill s academic and social behavior stayed at an acceptable level but it then began to assume the old pattern of variability even though Bill received his points daily and was saving his cards.

When his mother returned on day 40 and again began to record his daily points Bill s written work reached the 100% complete instructional objective and remained there until the end of the school year.

Bill earned his new bicycle and his mother's pride in his accomplishment was evident at the last parent conference

The use of systematic classroom procedures and home consequences made it possible for Bill to succeed in a normal classroom setting, and in this case the home consequences were an important factor in the success of the program

Follow up the following year showed that Bill was doing well in the third grade without any change in the existing classroom environment.

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